
WO 9924580 A2 19990520 (199935)* EN 98
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
W: AU CA JP
AU 9915204 A 19990531 (199941)
EP 1029055 A2 20000823 (200041) EN
R: AT BE CH DE DK ES FI FR GB GR IE IT LI NL SE
US 6280963 B1 20010828 (200151)
US 2002119509 A1 20020829 (200259)
US 2002142363 A1 20021003 (200267)
US 6461826 B1 20021008 (200269)
US 6465198 B1 20021015 (200271)
US 6514715 B2 20030204 (200313)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9924580	A2	WO 1998-US23874	19981109
AU 9915204	A	AU 1999-15204	19981109
EP 1029055	A2	EP 1998-959398	19981109
		WO 1998-US23874	19981109
US 6280963	B1	US 1997-965762	19971107
US 2002119509	A1 Div ex	US 1997-965762	19971107
		US 2001-911888	20010723
US 2002142363	A1 Div ex	US 1997-965762	19971107
		US 2001-911927	20010723
US 6461826	B1 Div ex	US 1997-965762	19971107
		US 2001-911927	20010723
US 6465198	B1 Div ex	US 1997-965762	19971107
		US 2001-911882	20010723
US 6514715	B2 Div ex	US 1997-965762	19971107
		US 2001-911888	20010723

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9915204	A	Based on	WO 9924580
EP 1029055	A2	Based on	WO 9924580
US 6461826	B1	Div ex	US 6280963
US 6465198	B1	Div ex	US 6280963
US 6514715	B2	Div ex	US 6280963

PRIORITY APPLN. INFO: US 1997-965762 19971107; US 2001-911888 20010723; US 2001-911927 20010723; US 2001-911882 20010723

AN 1999-418430 [35] WPIDS

AB WO 9924580 A UPAB: 19990902
NOVELTY - Nucleic acids encoding Aspergillus nidulans proteins AN97, AN80, AN85 and AN17 are new.

DETAILED DESCRIPTION - An isolated nucleic acid, or an allelic variant encodes a 1113, 386, 357 or 222 amino acid sequence (given in the specification) of Aspergillus nidulans proteins AN97, AN80, AN85 or AN17.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid comprising a sequence selected from:

(a) a 5596, 1758, 1792 or 1899 bp sequence (given in the specification), or their degenerate variants;

(b) the sequence of (a) where T is replaced by U;

(c) complements to (a) or (b), or

(d) fragments of (a), (b) or (c) that are at least 15 bp in length and which hybridized under stringent conditions to genomic DNA encoding AN97, AN80, AN85 or AN17 as above;

(2) an isolated nucleic acid from Aspergillus comprising a nucleotide sequence at least 85% identical to the 5596, 1758, 1792 or 1899 bp sequences that encode AN97, AN80, AN85 or AN17;

(3) an isolated nucleic acid that is at least 15 bp in length and hybridizes under stringent conditions to a sequence as in (1a);

(4) a cDNA sequence contained within ATCC accession number 209471, 209472, 209473 or 209484;

(5) a **vector** comprising a nucleic acid as above, optionally operably linked to a nucleotide sequence **regulatory element** that controls expression of the nucleic acid;

(6) a genetically engineered host cell comprising a nucleic acid or **vector** as above;

(7) an AN97, AN80, AN85 or AN17 **polypeptide** as above;

(8) methods of identifying an antifungal agent;

(9) a pharmaceutical formulation comprising an antifungal agent, identified by the method of (8), or a ribozyme or antisense nucleic acid that inhibits AN97, AN17, AN80 or AN85, and a **carrier**;

(10) an antibody that specifically binds to an AN **polypeptide**; and

(11) methods for identifying anti-yeast agents.

ACTIVITY - Fungistatic; Fungicidal.

MECHANISM OF ACTION - Ribozyme; Antisense Nucleic Acid.

USE - The antifungal can be used to treat an organism, rodent, human or plant, having a fungal infection, e.g. aspergillosis. This can be applied to domestic animals, e.g. cows and pigs. The antifungal agent can be a ribozyme, antisense nucleic acid or any other test compound identified in the methods using pathogenic Aspergillus AN proteins. Yeast homologues of the AN proteins can also be used in the methods to identify anti-yeast agents (all claimed). The antibodies can facilitate detection of AN **polypeptides** in various Aspergillus strains.

Dwg.0/8

L10 ANSWER 33 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1998-272217 [24] WPIDS

DOC. NO. CPI: C1998-085058
TITLE: Human phosphoprotein polypeptide, hPSHP - useful for treating degenerative neuronal diseases e.g. Parkinson's and Huntington's, diagnosing hPSHP related diseases and drug screening.
DERWENT CLASS: B04 D16
INVENTOR(S): HILLMAN, J L
PATENT ASSIGNEE(S): (INCY-N) INCYTE PHARM INC
COUNTRY COUNT: 40
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9818922	A1	19980507	(199824)*	EN	64
RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AT AU BR CA CH CN DE DK ES FI GB IL JP KR MX NO NZ RU SE SG US					
AU 9749014	A	19980522	(199840)		
US 5917028	A	19990629	(199932)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9818922	A1	WO 1997-US18489	19971014
AU 9749014	A	AU 1997-49014	19971014
US 5917028	A	US 1996-739484	19961028

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9749014	A	Based on	WO 9818922

PRIORITY APPLN. INFO: US 1996-739484 19961028
AN 1998-272217 [24] WPIDS
AB WO 9818922 A UPAB: 19981021
Human phosphoprotein (hPSHP) **polypeptide** comprising 118 amino acid sequence (I) given in the specification, or fragments, is new. Also claimed are: (1) isolated **polynucleotide** (PN) which either : (i) encodes the **polypeptide** as above; (ii) hybridises to (i); (iii) has 454 bp sequence (II) given in the specification, or variants ; and (iv) is complementary to a sequence as in (iii); (2) hybridisation probes comprising a PN as in (i); (3) expression **vectors** containing a PN as in (i); (4) host cells containing the **vector** as in (3); (5) antibodies binding specifically to (I); and (6) agonists and antagonists binding specifically to (I).

USE - hPSHP is believed to function in the signal transduction pathway of neurotransmitters in brain tissue and in cell development

processes in peripheral organs, based on its chemical and structural homology with known phosphoproteins, GI 162690 and GI 741603. It (or fragments) is useful therapeutically to regenerate and enhance survival of nerve cells to halt degenerative processes in brain diseases such as Parkinson's and Huntington's disease. It can be included in pharmaceutical compositions with a suitable **carrier** (claimed) which can be administered to treat diseases associated with hPSHP e.g. degenerative neuronal diseases as above (claimed). It can be used to induce antibodies to hPSHP, useful to diagnose conditions/diseases characterised by hPSHP expression, in assays to monitor patients receiving treatment, as agonists, antagonists or targeting molecules for pharmaceutical delivery, or to purify naturally occurring/recombinant hPSHP. The **polypeptide** or fragments are also useful in conventional drug screening. hPSHP agonists are useful e.g. to stimulate residual hPSHP in treatment of degenerative neuronal diseases, whilst antagonists are useful to inhibit hPSHP, e.g. to regulate cell growth or suppress abnormal signal transduction in diseased tissue. **Polynucleotides** encoding hPSHP are also useful therapeutically, e.g. to create antisense molecules to block the biological activity of hPSHP to treat diseases associated with hPSHP expression. They may be used diagnostically e.g. to detect and quantify gene expression in biopsied tissues in which hPSHP expression is implicated (e.g. associated with neurological diseases) and to monitor hPSHP levels during therapeutic intervention. Hybridisation probes may be produced, useful to detect related sequences or map naturally occurring sequences to a particular chromosome/chromosome region, and primers designed to extend partial sequences or detect upstream sequences e.g. promoters and **regulatory elements**.

Dwg.0/5

L10 ANSWER 34 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1998-217265 [19] WPIDS
DOC. NO. NON-CPI: N1998-171723
DOC. NO. CPI: C1998-068955
TITLE: Human GTP binding protein gamma-3, HGPG - is useful for e.g. diagnostic assays for diseases linked with excess HGPG expression and screening for antagonists useful in cancer treatment.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): BANDMAN, O; GOLI, S K; MURRY, L E
PATENT ASSIGNEE(S): (INCY-N) INCYTE PHARM INC
COUNTRY COUNT: 40
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9812325	A1	19980326	(199819)*	EN	56

RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

W: AT AU BR CA CH CN DE DK ES FI GB IL JP KR MX NO NZ RU SE SG US

AU 9743557	A	19980414	(199839)	
EP 929672	A1	19990721	(199933)	EN
R: BE DE ES FR GB IT NL				
US 5935812	A	19990810	(199938)	
JP 2001501087	W	20010130	(200110)	67

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9812325	A1	WO 1997-US16640	19970917
AU 9743557	A	AU 1997-43557	19970917
EP 929672	A1	EP 1997-941704	19970917
		WO 1997-US16640	19970917
US 5935812	A	US 1996-715527	19960918
JP 2001501087	W	WO 1997-US16640	19970917
		JP 1998-514898	19970917

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9743557	A	Based on	WO 9812325
EP 929672	A1	Based on	WO 9812325
JP 2001501087	W	Based on	WO 9812325

PRIORITY APPLN. INFO: US 1996-715527 19960918

AN 1998-217265 [19] WPIDS

AB WO 9812325 A UPAB: 19980512

A **polypeptide** comprising 75 amino acid sequence (I) (or fragments) for a human GTP binding protein gamma -3 (HGPG) is new. Also claimed are: (1) an isolated **polynucleotide** as follows: (i) encoding HGPG and comprising 527 bp sequence (II) or variants; (ii) complementary or hybridising to a sequence of (i); (2) hybridisation probes comprising sequence (II) or fragments; (3) expression **vectors** containing **polynucleotide** as in (1)(i); (4) host cells containing the **vector**; (5) antibodies binding specifically to HGPG, and (6) antagonists identified using the **polypeptide**, which specifically bind to and modulate **polypeptide** activity. All sequences are given in the specification.

The **polypeptide** (or fragments) can be produced by culturing host cells containing the **vector** in conditions suitable for **polypeptide** expression and recovering the **polypeptide** from the host cell culture (claimed). Alternatively, HGPG can be isolated from natural sources (especially mammals) or chemically synthesised by standard techniques.

USE - The **polypeptide** can be used to screen compounds for specific binding affinity with the **polypeptide** (or a

portion) in known drug screening techniques, by combining it with a compound for sufficient time and in suitable conditions to allow binding, and detecting binding (claimed). In this way antagonists specifically binding to and modulating **polypeptide** activity can be identified (claimed). The antagonists can be combined with an acceptable **carrier** in pharmaceutical compositions (claimed), especially for treating cancer (claimed), or used e.g. to ameliorate the adverse effects of inflammatory cells e.g. in autoimmune diseases. The **polynucleotides** are useful in diagnostic assays of cells, tissues or extracts for conditions/diseases characterised by excess HGPG expression (e.g. biopsied tissue in which HGPG may be expressed in response to inflammation or oncogenes) and to monitor HGPG levels during therapeutic intervention. Such assays allow early intervention e.g. to inhibit the growth of brain or breast tumours or prevent unwarranted tissue destruction in the bone marrow, corpus callosum etc. of Alzheimer's patients, using antagonists or **vectors** expressing antisense sequences produced from the **polynucleotides**. The nucleic acids encoding HGPG are also useful to detect unknown upstream sequences, e.g. promoters and **regulatory elements**, by standard techniques. The hybridisation probes are useful to detect **polynucleotides** encoding HGPG (or closely related molecules) in biological samples (claimed) and for mapping the naturally occurring genomic sequence to a particular chromosome/chromosome region. The antibodies can be used to examine HGPG prevalence in vivo, useful e.g. for diagnosis and treatment of conditions/diseases associated with HGPG expression, or in assays to monitor patients during therapeutic intervention.

Dwg.0/4

L10 ANSWER 35 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1998-217205 [19] WPIDS
DOC. NO. CPI: C1998-068895
TITLE: Human tumour proteins TUPROA and TUPROB, collectively called TUPRO - are useful for e.g. diagnostic assays for diseases linked with TUPRO expression and screening for antagonists useful in cancer treatment.
DERWENT CLASS: B04
INVENTOR(S): AU-YOUNG, J; BANDMAN, O; GOLI, S K; HILLMAN, J L
PATENT ASSIGNEE(S): (INCY-N) INCYTE PHARM INC
COUNTRY COUNT: 40
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9812220	A2	19980326	(199819)*	EN	64

RW: AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW
W: AT AU BR CA CH CN DE ES FI GB IL JP KR MX NO NZ RU SE SG US

AU 9744835	A	19980414	(199839)	
US 5874286	A	19990223	(199915)	
EP 929673	A2	19990721	(199933)	EN
R: BE DE ES FR GB IT NL				
US 6043343	A	20000328	(200023)	
JP 2001501816 W		20010213	(200112)	79

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 9812220	A2		WO 1997-US16460	19970916
AU 9744835	A		AU 1997-44835	19970916
US 5874286	A		US 1996-715204	19960918
EP 929673	A2		EP 1997-943344	19970916
			WO 1997-US16460	19970916
US 6043343	A	Div ex	US 1996-715204	19960918
			US 1998-162597	19980929
JP 2001501816 W			WO 1997-US16460	19970916
			JP 1998-514835	19970916

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9744835	A	Based on	WO 9812220
EP 929673	A2	Based on	WO 9812220
US 6043343	A	Div ex	US 5874286
JP 2001501816 W		Based on	WO 9812220

PRIORITY APPLN. INFO: US 1996-715204 19960918; US 1998-162597 19980929

AN 1998-217205 [19] WPIDS

AB WO 9812220 A UPAB: 19980512

Human tumour proteins comprising 204 and 245 amino acid sequences (I) and (II) (or fragments) for TUPROA and TUPROB (collectively called TUPRO) respectively are new. Also claimed are: (1) isolated **polynucleotides** as follows: (i) encoding TUPROA and TUPROB and comprising 790 and 888 bp sequences (III) and (IV) respectively, or variants; (ii) complementary to a sequence as in (i); (2) expression **vectors** containing **polynucleotides** as in (1)(i); (3) host cells containing the **vector**; (4) antibodies binding specifically to TUPRO, and (5) antagonists which specifically regulate/modulate **polypeptide** activity. All sequences are given in the specification.

The **polypeptides** can be produced by culturing host cells containing the **vectors** in conditions suitable for **polypeptide** expression, and recovering the **polypeptides** from the host cell culture (claimed). Alternatively, TUPRO can be isolated from natural sources (especially mammals) or chemically synthesised by standard

techniques.

USE - Mutations in tumour genes are often found in human tumours, and may be essential for tumour development, or enable tumours to withstand chemotherapy. The new tumour proteins may therefore be used (or may provide agents) to diagnose, prevent or treat cancer. The **polypeptides** can be included, with an acceptable **carrier**, in pharmaceutical preparations (claimed). They (or fragments) are useful to screen for therapeutic compounds e.g. antagonists by known drug screening techniques. Antagonists can also be combined with acceptable **carriers** in pharmaceutical compositions (claimed), especially for treating cancer (claimed). The **polynucleotides** are useful in diagnostic assays for conditions/diseases associated with TUPRO expression (e.g. induction associated with cancer) and to monitor TUPRO levels during therapeutic intervention. They (or fragments) can be used in gene therapy to treat such conditions, or to design antisense sequences and ribozymes which can be administered to modify gene expression. They are useful to detect unknown upstream sequences, e.g. promoters and **regulatory elements**, by standard techniques, and for research into sense/antisense regulation of gene function. The **polynucleotides** can also be used to produce hybridisation probes useful to detect **polynucleotides** encoding TUPRO (or closely related molecules) and to map the naturally occurring genomic sequence to a particular chromosome/chromosome region. The antibodies are useful for diagnosis of conditions/diseases associated with TUPRO expression and to quantify TUPRO e.g. in assays to monitor patients during therapeutic intervention.

Dwg.0/10

L10 ANSWER 36 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1995-075240 [10] WPIDS
CROSS REFERENCE: 1992-114354 [14]; 1997-065203 [06]; 1997-108645 [10]
DOC. NO. CPI: C1995-033500
TITLE: Chicken anaemia virus (CAV) mutant polypeptide(s) - useful as vaccines or for inducing apoptosis.
DERWENT CLASS: B04 C06 C07 D16
INVENTOR(S): KOCH, G; NOTEBORN, M H M; NOTEBORM, M H M
PATENT ASSIGNEE(S): (AESC-N) AESCULAAP BV; (LEAD-N) LEADD BV
COUNTRY COUNT: 24
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9503414	A2	19950202	(199510)*	EN	53
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
W: AU CA CN HU JP US					
NL 9301272	A	19950216	(199512)		
AU 9475473	A	19950220	(199521)		
ZA 9405275	A	19950426	(199523)		53

WO 9503414 A3 19950302 (199612)
JP 09504941 W 19970520 (199730) 59
EP 784685 A1 19970723 (199734) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
AU 703187 B 19990318 (199923)
US 5922600 A 19990713 (199934)
US 5952002 A 19990914 (199944)
US 5981502 A 19991109 (199954)
US 6071520 A 20000606 (200033)
US 6162461 A 20001219 (200102)
US 6217870 B1 20010417 (200123)
EP 1253201 A2 20021030 (200279) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
EP 784685 B1 20030409 (200325) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
DE 69432486 E 20030515 (200340)

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 9503414	A2		WO 1994-NL168	19940719
NL 9301272	A		NL 1993-1272	19930720
AU 9475473	A		AU 1994-75473	19940719
ZA 9405275	A		ZA 1994-5275	19940719
JP 09504941	W		WO 1994-NL168	19940719
			JP 1995-505072	19940719
EP 784685	A1		EP 1994-925638	19940719
			WO 1994-NL168	19940719
AU 703187	B		AU 1994-75473	19940719
US 5922600	A	CIP of	WO 1991-NL165	19910911
		CIP of	US 1993-30335	19930308
		CIP of	WO 1994-NL168	19940719
			US 1995-489666	19950607
		CIP of	US 1995-454121	19951130
US 5952002	A	CIP of	WO 1991-NL165	19910911
		CIP of	US 1993-30335	19930308
		CIP of	WO 1994-NL168	19940719
		Cont of	US 1995-454121	19951130
			US 1997-911092	19970814
US 5981502	A	CIP of	US 1993-30335	19930308
		CIP of	WO 1994-NL168	19940719
			US 1995-485001	19950607
US 6071520	A	CIP of	US 1993-30335	19930308
			WO 1994-NL168	19940719
			US 1995-454121	19951130
US 6162461	A	CIP of	US 1993-30335	19930308
		CIP of	WO 1994-NL168	19940719
			US 1995-482161	19950607
		CIP of	US 1995-454121	19951130
US 6217870	B1	CIP of	WO 1991-NL165	19910911

		CIP of	US 1993-30335	19930308
		CIP of	WO 1994-NL168	19940719
		CIP of	US 1995-489666	19950607
		CIP of	US 1995-454121	19951130
			US 1998-57963	19980409
EP 1253201	A2	Div ex	EP 1994-925638	19940719
			EP 2001-205103	19940719
EP 784685	B1		EP 1994-925638	19940719
			WO 1994-NL168	19940719
		Related to	EP 2001-205103	19940719
DE 69432486	E		DE 1994-632486	19940719
			EP 1994-925638	19940719
			WO 1994-NL168	19940719

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9475473	A	Based on	WO 9503414
JP 09504941	W	Based on	WO 9503414
EP 784685	A1	Based on	WO 9503414
AU 703187	B	Previous Publ.	AU 9475473
		Based on	WO 9503414
US 5922600	A	CIP of	US 5491073
US 5952002	A	CIP of	US 5491073
US 5981502	A	CIP of	US 5491073
US 6071520	A	Based on	WO 9503414
US 6217870	B1	CIP of	US 5491073
		CIP of	US 5922600
		CIP of	US 6071520
EP 1253201	A2	Div ex	EP 784685
EP 784685	B1	Related to	EP 1253201
		Based on	WO 9503414
DE 69432486	E	Based on	EP 784685
		Based on	WO 9503414

PRIORITY APPLN. INFO: NL 1993-1272 19930720; NL 1990-2008 19900912

AN 1995-075240 [10] WPIDS

CR 1992-114354 [14]; 1997-065203 [06]; 1997-108645 [10]

AB WO 9503414 A UPAB: 20030624

A **polypeptide** (A) derived from Chicken Anaemia Virus (CAV), free from its natural environment, comprises at least a part of one of VP1, VP2 or VP3 (given in the specification). (A) can induce apoptosis or either directly or can indirectly generate antibodies (Abs) against CAV.

Also claimed are: (1) a recombinant DNA molecule (I) encoding at least 1 of (A); (2) a **vector**, comprising at least 1 of (I) and conventional **regulating elements** for expression; (3) a host cell, transfected with the **vector** of (2); (4) an attenuated CAV, possessing a mutation in its DNA,

encoding at least 1 viral protein, resulting in a decrease in capacity of inducing apoptosis; (4) an antibody (Ab) or deriv. or fragment, directed against (A); (5) an appts. for detecting Abs against CAV comprising at least 1 of (A); (6) an appts. for detecting (A) comprising at least 1 Ab or fragment or deriv.; (7) a conjugate for treating tumours, comprising at least 1 of (A) and a substance with affinity to tumour-associated proteins, sugars or lipids; and (8) a composn. contg. (A) and an **adjuvant** to prevent CAV.

USE - (A) is useful in a vaccine compsn. (claimed) for preventing CAV infection in poultry. The attenuated virus and **vector** can also be used for preventing CAV infection. (A) can be used to induce cell death (apoptosis), e.g. for treating tumours.

Dwg.0/12

L10 ANSWER 37 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1986-220202 [34] WPIDS
DOC. NO. CPI: C1986-094801
TITLE: Poly peptide prodn. for vaccines against malaria - is by cultivating escherichia coli strain transformed with vector coding for repeat unit circumsporozoite protein of plasmodium falciparum.
DERWENT CLASS: B04 D16
INVENTOR(S): GROSS, M S; YOUNG, J F; GROSS, M S W
PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BECKMAN CORP; (SMIK) SMITHKLINE BEECHAM CORP
COUNTRY COUNT: 20
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 191748	A	19860820	(198634)*	EN	36
R: AT BE CH DE FR GB IT LI LU NL SE					
AU 8652936	A	19860814	(198639)		
JP 61181387	A	19860814	(198639)		
ZA 8600797	A	19860807	(198645)		
DK 8600624	A	19860808	(198650)		
PT 81967	A	19870227	(198713)		
HU 40917	T	19870330	(198716)		
ES 8704975	A	19870701	(198730)		
CN 86100979	A	19861217	(198749)		
DD 254958	A	19880316	(198832)		
EP 191748	B1	19921111	(199246)	EN	21
R: AT BE CH DE FR GB IT LI LU NL SE					
DE 3687071	G	19921217	(199252)		
JP 06098005	B2	19941207	(199502)		12
JP 07170995	A	19950711	(199536)		13
JP 07102150	B2	19951108	(199549)		12

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
EP 191748	A		EP 1986-870013	19860203
JP 61181387	A		JP 1986-25660	19860206
ES 8704975	A		ES 1986-551656	19860205
EP 191748	B1		EP 1986-870013	19860203
DE 3687071	G		DE 1986-3687071	19860203
			EP 1986-870013	19860203
JP 06098005	B2		JP 1986-25660	19860206
JP 07170995	A	Div ex	JP 1986-25660	19860206
			JP 1994-106595	19860206
JP 07102150	B2	Div ex	JP 1986-25660	19860206
			JP 1994-106595	19860206

FILING DETAILS:

PATENT NO	KIND		PATENT NO
DE 3687071	G	Based on	EP 191748
JP 06098005	B2	Based on	JP 61181387
JP 07102150	B2	Based on	JP 07170995

PRIORITY APPLN. INFO: US 1985-699115 19850207

AN 1986-220202 [34] WPIDS

AB EP 191748 A UPAB: 19930922

(1) Escheichia coli expression **vector** having a coding sequence for all or a proportion of the repeat unit of the circumsporozoite (CS) protein of plasmodium falciparum operatively linked to a **regulatory element** is new. (2) E. coli strain transformed with a **vector** as defined above is new. (3) Purificn. of a **polypeptide** (I) having at least 4 tandem repeat units of plasmodium falciparum CS protein from a cell extract of producing E. coli comprises addn. of a detergent to the cell extract, followed by heating of the extract to ppte. bacterial proteins and further purifying (I) from the supernatant. The producing E. coli may be a transformed strain as defined in paragraph (2) above.

USE/ADVANTAGE - (I) are useful in the prepn. of vaccines against malaria, esp. when there are 8 (i.e. 32 amino acids) to 148 repeats (I) may be a fusion **polypeptide** having non-CS protein repeat unit sequences, which serve as a **carrier** to enhance immunogenicity or to facilitate cloning and expression in recombinant micro-organisms. The sequences may alternatively carry an epitope(s) for other sporozoite immunogens and other plasmodium or non-plasmodium immunogens. Dose is 1-1000 micrograms (I), esp. 10-200 micrograms, initially, with a boost after 4 weeks and then every 6 months.

0/1

ABEQ EP 191748 B UPAB: 19930922

An E.coli expression vector comprising a DNA sequence encoding a

polypeptide, comprising at least four tandem repeat units of the plasmodium falciparum circumsporozoite protein and a non circumsporozoite protein characterised in that the non-circumsporozoite protein is selected from any of Gly and Leu-Arg influenza virus non-structural protein 1 (NS1); 81 N-terminal aminoacids of NS1; Asn-Thr-Val-Ser-Ser; 86 N-terminal aminoacids of a tetracycline resistance gene product (tet86); and 32 N-terminal aminoacids of a tetracycline resistance gene product (tet32) and further characterised in that the tandem repeat unit comprises the formula N-Met-Asp-Pro((Asn-Ala-Asn- Pro)15(Asn-Val-Asp-Pro)1)n, wherein n is at least 1, the DNA sequence being operatively linked to a regulatory element.
0/1

(FILE 'USPATFULL' ENTERED AT 10:45:11 ON 21 NOV 2003)

L12 6574 SEA FILE=USPATFULL ABB=ON PLU=ON (POLYNUCLEOTIDE OR POLYPROTEIN OR POLYPEPTIDE OR POLY(W)(NUCLEOTIDE OR PEPTIDE OR PROTEIN))(S)(VECTOR(5A)(VACCINE OR REPLICAT?))

L13 246 SEA FILE=USPATFULL ABB=ON PLU=ON L12(S)(REGULAT? ELEMENT)

L14 13 SEA FILE=USPATFULL ABB=ON PLU=ON L13(S)(CARRIER OR ADJUVANT)

L14 ANSWER 1 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:300373 USPATFULL

TITLE: Expression of core-glycosylated HCV envelope proteins in yeast

INVENTOR(S): Bosman, Fons, Opwijk, BELGIUM
Depla, Erik, Destelbergen, BELGIUM
Deschamps, Geert, Aalter, BELGIUM
Sablon, Erwin, Merchtem, BELGIUM
Samson, Isabelle, Heule, BELGIUM
Van Broekhoven, Annie, Berchem, BELGIUM
Haelewyn, Joost, Gent, BELGIUM

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003211597	A1	20031113	
APPLICATION INFO.:	US 2002-128578	A1	20020424	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-870088	20010424
	US 2001-305604P	20010717 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA, 22201-4714
NUMBER OF CLAIMS: 47
EXEMPLARY CLAIM: 1

Searcher : Shears 308-4994

NUMBER OF DRAWINGS: 54 Drawing Page(s)
LINE COUNT: 8647

AB The present invention relates to the general field of recombinant protein expression, purification of recombinant proteins, diagnosis of HCV infection, prophylactic treatment against HCV infection and to the prognosing/monitoring of the clinical efficiency of treatment of an individual with chronic hepatitis, or the prognosing/monitoring of the natural disease. In particular, the present invention relates to the use of yeast, i.e. Hansenula or Saccharomyces glycosylation minus strains, for the efficient expression of HCV envelope proteins that are core-glycosylated, purification methods for these proteins, and the use in various applications, such as the use in diagnosis, prophylaxis or therapy of HCV envelope proteins purified according to the present invention,

INCL INCLM: 435/320.100
INCLS: 435/005.000; 530/350.000; 536/023.720; 530/326.000; 435/235.100; 435/239.000; 424/227.100
NCL NCLM: 435/320.100
NCLS: 435/005.000; 530/350.000; 536/023.720; 530/326.000; 435/235.100; 435/239.000; 424/227.100

L14 ANSWER 2 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:288229 USPATFULL
TITLE: Particles of HCV envelope proteins: use for vaccination
INVENTOR(S): Depla, Erik, Destelbergen, BELGIUM
Maertens, Geert, Brugge, BELGIUM
Bosman, Alfons, Opwijk, BELGIUM
Wijnendaele, Frans Van, Laarne, BELGIUM
PATENT ASSIGNEE(S): INNOGENETICS (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003202987	A1	20031030
APPLICATION INFO.:	US 2003-414219	A1	20030416 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-355040, filed on 23 Jul 1999, PENDING A 371 of International Ser. No. WO 1999-EP4342, filed on 23 Jun 1999, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1998-870142	19980624
	EP 1999-870033	19990222

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NIXON & VANDERHYE, PC, 1100 N GLEBE ROAD, 8TH FLOOR, ARLINGTON, VA, 22201-4714
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: 1

Searcher : Shears 308-4994

NUMBER OF DRAWINGS: 38 Drawing Page(s)
LINE COUNT: 2650
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is based on the finding that the envelope proteins of HCV induce a beneficial immune response in chronically HCV-infected chimpanzees. The immunization can preferentially be carried out using HCV envelope proteins in the form of particles which are produced in a detergent-assisted manner. The envelope proteins when presented as such to chronic HCV carriers are highly immunogenic and stimulate both the cellular and humoral immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/228.100
INCLS: 435/235.100; 424/204.100; 424/186.100
NCL NCLM: 424/228.100
NCLS: 435/235.100; 424/204.100; 424/186.100

L14 ANSWER 3 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:279017 USPATFULL
TITLE: Particles of HCV envelope proteins: use for vaccination
INVENTOR(S): Depla, Erik, Destelbergen, BELGIUM
Maertens, Geert, Brugge, BELGIUM
Bosman, Alfons, Opwiik, BELGIUM
Van Wijnendaele, Frans, Laarne, BELGIUM
PATENT ASSIGNEE(S): Innogentics N.V., Ghent, BELGIUM (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6635257	B1	20031021	
	WO 9967285		19991229	
APPLICATION INFO.:	US 1999-355040		19990723	(9)
	WO 1999-EP4342		19990623	

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1998-870142	19980624
	EP 1999-870033	19990222

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Housel, James
ASSISTANT EXAMINER: Winkler, Ulrike
LEGAL REPRESENTATIVE: Nixon & Vanderhye
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 39 Drawing Figure(s); 38 Drawing Page(s)
LINE COUNT: 2526
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is based on the finding that the envelope

proteins of HCV induce a beneficial immune response in chronically HCV-infected chimpanzees. The immunization can preferentially be carried out using HCV envelope proteins in the form of particles which are produced in a detergent-assisted manner. The envelope proteins when presented as such to chronic HCV carriers are highly immunogenic and stimulate both the cellular and humoral immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/228.100
INCLS: 424/185.100; 435/005.000; 435/069.100; 435/235.100; 530/350.000; 530/826.000
NCL NCLM: 424/228.100
NCLS: 424/185.100; 435/005.000; 435/069.100; 435/235.100; 530/350.000; 530/826.000

L14 ANSWER 4 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:237907 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of colon cancer
INVENTOR(S): King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003166064	A1	20030904
APPLICATION INFO.:	US 2002-99926	A1	20020314 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-33528, filed on 26 Dec 2001, PENDING
Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302051P	20010629 (60)
	US 2001-279763P	20010328 (60)
	US 2000-223283P	20000803 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 8531
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.100
INCLS: 536/023.100
NCL NCLM: 435/069.100
NCLS: 536/023.100

L14 ANSWER 5 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:219650 USPATFULL
TITLE: Constructs and methods for expression of recombinant HCV envelope proteins
INVENTOR(S): Sablon, Erwin, Merchtem, BELGIUM
Van Broekhoven, Annie, Berchem, BELGIUM
Bosman, Fons, Opwijk, BELGIUM
Depla, Erik, Destelbergen, BELGIUM
Deschamps, Geert, Aalter, BELGIUM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003152940	A1	20030814
APPLICATION INFO.:	US 2002-128587	A1	20020424 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-870088	20010424
	US 2001-305604P	20010717 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NIXON & VANDERHYE P.C., 8th Floor, 1100 North Glebe Road, Arlington, VA, 22201
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 54 Drawing Page(s)
LINE COUNT: 9302
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The current invention relates to vectors and methods for efficient expression of HCV envelope proteins in eukaryotic cells. More particularly said vectors comprise the coding sequence for an avian lysozyme signal peptide or a functional equivalent thereof joined to a HCV envelope protein or a part thereof. Said avian lysozyme signal peptide is efficiently removed when the protein comprising said avian lysozyme signal peptide joined to a HCV

envelope protein or a part thereof is expressed in a eukaryotic cell. Suitable eukaryotic cells include yeast cells such as Saccharomyces or Hansenula cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/006.000
INCLS: 435/069.100; 435/206.000; 435/320.100; 435/325.000; 536/023.200
NCL NCLM: 435/006.000
NCLS: 435/069.100; 435/206.000; 435/320.100; 435/325.000; 536/023.200

L14 ANSWER 6 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:200905 USPATFULL
TITLE: Novel G protein-coupled receptor family members, human thioredoxin family members, human leucine-rich repeat family members, and human ringfinger family member
INVENTOR(S): Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES
Silos-Santiago, Inmaculada, Jamaica Plain, MA, UNITED STATES
Galvin, Katherine M., Jamaica Plain, MA, UNITED STATES
Weich, Nadine, Brookline, MA, UNITED STATES
Curtis, Rory A. J., Framingham, MA, UNITED STATES
Bandaru, Rajasekhar, Watertown, MA, UNITED STATES
Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003138890	A1	20030724
APPLICATION INFO.:	US 2002-145586	A1	20020514 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-796338, filed on 28 Feb 2001, PENDING
Continuation-in-part of Ser. No. WO 2001-US6543, filed on 28 Feb 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	WO 2001-US6057	20010223
	WO 2001-US23152	20010723
	WO 2001-US40476	20010409
	WO 2001-US7139	20010305
	WO 2001-US19544	20010615
	WO 2001-US29967	20010925
	WO 2001-US9470	20010323
	WO 2001-US10380	20010330
	WO 2001-US29968	20010925
	US 2000-186059P	20000229 (60)

	US 2000-220042P	20000721 (60)
	US 2000-187447P	20000307 (60)
	US 2000-211673P	20000615 (60)
	US 2000-235049P	20000925 (60)
	US 2000-191863P	20000324 (60)
	US 2000-193919P	20000331 (60)
	US 2000-235032P	20000925 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JOHN W. FREEMAN, ESQ., Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	97 Drawing Page(s)	
LINE COUNT:	51652	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides isolated nucleic acids molecules, designated 20716, 65494, 44576, 1983, 52881, 2398, 45449, 50289, 52872, 22105, 22109, 22108, 47916, 33395, 31939, and 84241 nucleic acid molecules, which encode novel G protein-coupled receptor family members, human thioredoxin family members, human leucine-rich repeat family members, and human ringfinger family member. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 20716, 65494, 44576, 1983, 52881, 2398, 45449, 50289, 52872, 22105, 22109, 22108, 47916, 33395, 31939, or 84241 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 20716, 65494, 44576, 1983, 52881, 2398, 45449, 50289, 52872, 22105, 22109, 22108, 47916, 33395, 31939, or 84241 gene has been introduced or disrupted. The invention still further provides isolated 20716, 65494, 44576, 1983, 52881, 2398, 45449, 50289, 52872, 22105, 22109, 22108, 47916, 33395, 31939, or 84241 proteins, fusion proteins, antigenic peptides and anti-20716, 65494, 44576, 1983, 52881, 2398, 45449, 50289, 52872, 22105, 22109, 22108, 47916, 33395, 31939, or 84241 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/069.100
INCLS: 435/320.100; 435/325.000; 530/350.000; 536/023.500

NCL NCLM: 435/069.100
NCLS: 435/320.100; 435/325.000; 530/350.000; 536/023.500

L14 ANSWER 7 OF 13 USPATFULL on STN

ACCESSION NUMBER:	2003:158948 USPATFULL
TITLE:	Core-glycosylated HCV envelope proteins
INVENTOR(S):	Bosman, Fons, Opwijk, BELGIUM Depla, Erik, Destelbergen, BELGIUM Deschamps, Geert, Aalter, BELGIUM Sablon, Erwin, Merchtem, BELGIUM

Suckow, Manfred, Dusseldorf, GERMANY, FEDERAL REPUBLIC OF
Samson, Isabelle, Heule, BELGIUM
Verheyden, Gert, Holsbeek, BELGIUM

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003108561	A1	20030612
APPLICATION INFO.:	US 2002-128590	A1	20020424 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2001-870088	20010424
	US 2001-305604P	20010717 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NIXON & VANDERHYE P.C., 8th Floor, 1100 North Glebe Road, Arlington, VA, 22201-4714
NUMBER OF CLAIMS: 40
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 70 Drawing Page(s)
LINE COUNT: 9836

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The current invention relates to HCV envelope proteins or parts thereof which are the product of expression in eukaryotic cells. More particularly said HCV envelope proteins are characterized in that on average up to 80% of their N-glycosylation sites are core-glycosylated. Of these N-glycosylated sites more than 70% are glycosylated with an oligomannose having a structure defined by Man(8 to 10)-GlcNAc(2). Furthermore, the ratio of the oligomannose with structure Man(7)-GlcNAc(2) over the oligomannose with structure Man(8)-GlcNAc(2) is less than or equal to 0.45. Less than 10% of the oligomannoses is terminated with an .alpha.1,3 linked mannose. The HCV envelope proteins of the invention are particularly suited for diagnostic, prophylactic and therapeutic purposes. A suitable eukaryotic cell for production of the HCV envelope proteins of the invention is a Hansenula cell.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/186.100
INCLS: 530/395.000
NCL NCLM: 424/186.100
NCLS: 530/395.000

L14 ANSWER 8 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:106233 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of pancreatic cancer
INVENTOR(S): Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES

Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003073144	A1	20030417	
APPLICATION INFO.:	US 2002-60036	A1	20020130	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-333626P	20011127	(60)
	US 2001-305484P	20010712	(60)
	US 2001-265305P	20010130	(60)
	US 2001-267568P	20010209	(60)
	US 2001-313999P	20010820	(60)
	US 2001-291631P	20010516	(60)
	US 2001-287112P	20010428	(60)
	US 2001-278651P	20010321	(60)
	US 2001-265682P	20010131	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 14253
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/007.230
INCLS: 435/069.100; 435/320.100; 435/325.000; 435/183.000; 536/023.200
NCL NCLM: 435/007.230
NCLS: 435/069.100; 435/320.100; 435/325.000; 435/183.000; 536/023.200

L14 ANSWER 9 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:86313 USPATFULL
TITLE: Novel human 39228, 21956, 25856, 22244, 8701,

32263, 50250, 55158, 47765, 62088, 50566, and 48118 molecules and uses therefor

INVENTOR(S): Meyers, Rachel E., Newton, MA, UNITED STATES
Rudolph-Owen, Laura A., Jamaica Plain, MA, UNITED STATES
Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED STATES
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, UNITED STATES, 02139 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003059919	A1	20030327
APPLICATION INFO.:	US 2002-160501	A1	20020530 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-838573, filed on 18 Apr 2001, PENDING
Continuation-in-part of Ser. No. US 2001-870133, filed on 29 May 2001, PENDING
Continuation-in-part of Ser. No. US 2001-870130, filed on 29 May 2001, PENDING
Continuation-in-part of Ser. No. US 2001-862535, filed on 21 May 2001, PENDING
Continuation-in-part of Ser. No. US 2001-870383, filed on 29 May 2001, PENDING
Continuation-in-part of Ser. No. US 2001-860821, filed on 18 May 2001, PENDING
Continuation-in-part of Ser. No. US 2001-870110, filed on 29 May 2001, PENDING
Continuation-in-part of Ser. No. US 2001-907509, filed on 16 Jul 2001, PENDING
Continuation-in-part of Ser. No. US 2001-945327, filed on 31 Aug 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-197747P	20000418 (60)
	US 2000-207649P	20000526 (60)
	US 2000-207640P	20000526 (60)
	US 2000-205961P	20000519 (60)
	US 2000-207506P	20000526 (60)
	US 2000-205449P	20000519 (60)
	US 2000-207650P	20000526 (60)
	US 2000-218385P	20000714 (60)
	US 2000-229425P	20000831 (60)
	US 2001-318581P	20010910 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 100 Drawing Page(s)
LINE COUNT: 44311
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides isolated nucleic acids molecules, designated 39228, 21956, 25856, 22244, 8701, 32263, 50250, 55158, 47765, 62088, 50566, and 48118 nucleic acid molecules, which encode novel GTPase activating molecules, cadherin molecules, and ankyrin containing family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 39228, 21956, 25856, 22244, 8701, 32263, 50250, 55158, 47765, 62088, 50566, and 48118 nucleic acid molecules, host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 39228, 21956, 25856, 22244, 8701, 32263, 50250, 55158, 47765, 62088, 50566, or 48118 gene has been introduced or disrupted. The invention still further provides isolated 39228, 21956, 25856, 22244, 8701, 32263, 50250, 55158, 47765, 62088, 50566, and 48118 polypeptides, fusion polypeptides, antigenic peptides and anti-39228, 21956, 25856, 22244, 8701, 32263, 50250, 55158, 47765, 62088, 50566, and 48118 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/199.000
INCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 536/023.200
NCL NCLM: 435/199.000
NCLS: 435/069.100; 435/320.100; 435/325.000; 530/350.000; 536/023.200

L14 ANSWER 10 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2002:272801 USPATFULL
TITLE: Compositions and methods for the therapy and diagnosis of colon cancer
INVENTOR(S): Stolk, John A., Bothell, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Chenault, Ruth A., Seattle, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002150922	A1	20021017	
APPLICATION INFO.:	US 2001-998598	A1	20011116	(9)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-304037P	20010710	(60)
	US 2001-279670P	20010328	(60)

Searcher : Shears 308-4994

	US 2001-267011P 20010206 (60)
	US 2000-252222P 20001120 (60)
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS:	17
EXEMPLARY CLAIM:	1
LINE COUNT:	9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 435/006.000
INCLS: 435/007.230; 435/069.100; 435/183.000; 435/320.100; 435/325.000; 536/023.200

NCL NCLM: 435/006.000
NCLS: 435/007.230; 435/069.100; 435/183.000; 435/320.100; 435/325.000; 536/023.200

L14 ANSWER 11 OF 13 USPATFULL on STN

ACCESSION NUMBER:	2002:243051 USPATFULL
TITLE:	Compositions and methods for the therapy and diagnosis of ovarian cancer
INVENTOR(S):	Algate, Paul A., Issaquah, WA, UNITED STATES Jones, Robert, Seattle, WA, UNITED STATES Harlocker, Susan L., Seattle, WA, UNITED STATES
PATENT ASSIGNEE(S):	Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002132237	A1	20020919	
APPLICATION INFO.:	US 2001-867701	A1	20010529	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-207484P	20000526 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092
NUMBER OF CLAIMS:	11

EXEMPLARY CLAIM: 1
LINE COUNT: 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/006.000
INCLS: 435/091.200
NCL NCLM: 435/006.000
NCLS: 435/091.200

L14 ANSWER 12 OF 13 USPATFULL on STN
ACCESSION NUMBER: 1999:102486 USPATFULL
TITLE: Method for recombinant production of biologically active polypeptides
INVENTOR(S): Ishizaka, Kimishige, La Jolla, CA, United States
Mikayama, Toshifumi, Gunma-Machi, Japan
PATENT ASSIGNEE(S): Kirin Beer Kabushiki Kaisha, Shibuya-ku, Japan (non-U.S. corporation)
La Jolla Institute for Allergy and Immunology, San Diego, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5945096		19990831
APPLICATION INFO.:	US 1995-456460		19950601 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1993-61041, filed on 14 May 1993, now abandoned which is a continuation-in-part of Ser. No. WO 1992-US4614, filed on 3 Jun 1992 which is a continuation-in-part of Ser. No. US 1991-709375, filed on 30 Jun 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-533889, filed on 4 Jun 1990, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Chan, Christina Y.
ASSISTANT EXAMINER: Nolan, Patrick J.
LEGAL REPRESENTATIVE: Fish & Richardson P.C.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 3652

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polypeptides, polynucleotides, fragments thereof, and monoclonal antibodies thereto are provided for antigen-specific and antigen-non-specific glycosylation inhibiting factor and a method for recombinant production of biologically active polypeptides from a structural gene encoding the polypeptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/085.100
INCLS: 424/198.100; 530/351.000

NCL NCLM: 424/085.100
NCLS: 424/198.100; 530/351.000

L14 ANSWER 13 OF 13 USPATFULL on STN

ACCESSION NUMBER: 1998:88662 USPATFULL

TITLE: Method for recombinant production of antigen non-specific glycosylation inhibiting factor (GIF)

INVENTOR(S): Ishizaka, Kimishige, La Jolla, CA, United States
Liu, Yun-Cai, San Diego, CA, United States
Mikayama, Toshifumi, Gunma-machi, Japan

PATENT ASSIGNEE(S): Kirin Beer Kabushiki Kaisha, Tokyo, Japan (non-U.S. corporation)
La Jolla Institute for Allergy and Immunology, San Jose, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5786168		19980728
APPLICATION INFO.:	US 1995-455633		19950531 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-61041, filed on 14 May 1993, now abandoned which is a continuation-in-part of Ser. No. US 1991-709375, filed on 3 Jun 1991, now abandoned which is a continuation-in-part of Ser. No. US 1990-533889, filed on 4 Jun 1990, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kemmerer, Elizabeth C.
ASSISTANT EXAMINER: Romeo, David S.
LEGAL REPRESENTATIVE: Fish & Richardson, P.C.
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 3700

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Polypeptides, polynucleotides, fragments thereof, and monoclonal antibodies thereto are provided for antigen-specific and antigen-non-specific glycosylation inhibiting factor and a method for recombinant production of biologically active polypeptides from a structural gene encoding the polypeptide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.100
INCLS: 435/069.700; 435/252.300; 435/320.100; 530/307.000; 530/395.000; 530/397.000; 530/412.000; 530/413.000; 536/023.100; 536/023.400; 536/023.500
NCL NCLM: 435/069.100
NCLS: 435/069.700; 435/252.300; 435/320.100; 530/307.000; 530/395.000; 530/397.000; 530/412.000; 530/413.000; 536/023.100; 536/023.400; 536/023.500

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 10:46:46 ON 21 NOV 2003)

- Author(s)

L15 525 SEA ABB=ON PLU=ON "BARBET A"?/AU
L16 110 SEA ABB=ON PLU=ON "WHITMIRE W"?/AU
L17 75 SEA ABB=ON PLU=ON "KAMPER S"?/AU
L18 49 SEA ABB=ON PLU=ON "SIMBI B"?/AU
L19 105 SEA ABB=ON PLU=ON "GANTA R"?/AU
L20 204 SEA ABB=ON PLU=ON "MORELAND A"?/AU
L21 104 SEA ABB=ON PLU=ON "MWANGI D"?/AU
L22 2573 SEA ABB=ON PLU=ON "MCGUIRE T"?/AU
L23 441 SEA ABB=ON PLU=ON "MAHAN S"?/AU
L24 8 SEA ABB=ON PLU=ON L15 AND L16 AND L17 AND L18 AND L19 AND L20 AND L21 AND L22 AND L23
L25 313 SEA ABB=ON PLU=ON L15 AND (L16 OR L17 OR L19 OR L20 OR L21 OR L22 OR L23)
L26 14 SEA ABB=ON PLU=ON L16 AND (L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR L23)
L27 8 SEA ABB=ON PLU=ON L17 AND (L18 OR L19 OR L20 OR L21 OR L22 OR L23)
L28 49 SEA ABB=ON PLU=ON L18 AND (L19 OR L20 OR L21 OR L22 OR L23)
L29 21 SEA ABB=ON PLU=ON L19 AND (L20 OR L21 OR L22 OR L23)
L30 14 SEA ABB=ON PLU=ON L20 AND (L21 OR L22 OR L23)
L31 35 SEA ABB=ON PLU=ON L21 AND (L22 OR L23)
L32 54 SEA ABB=ON PLU=ON L22 AND L23
L33 3678 SEA ABB=ON PLU=ON L15 OR L16 OR L17 OR L18 OR L19 OR L20 OR L21 OR L22 OR L23
L34 27 SEA ABB=ON PLU=ON (L25 OR L28 OR L29 OR L31 OR L32 OR L33) AND L1
L35 35 SEA ABB=ON PLU=ON L24 OR L26 OR L27 OR L30 OR L34
L36 18 DUP REM L35 (17 DUPLICATES REMOVED)

L36 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2003:545722 HCAPLUS
DOCUMENT NUMBER: 139:83975
TITLE: Detection of antibodies against rickettsial antigens
INVENTOR(S): Barbet, Anthony F.; Bowie, Michael V.; **Ganta, Roman Reddy**; Burridge, Michael J.; **Mahan, Suman M.**; **McGuire,**

Travis C.; Rurangirwa, Fred R.; **Moreland, Annie L.**; **Simbi, Bigboy H.**; **Whitmire, William M.**; Alleman, Arthur R.

PATENT ASSIGNEE(S): University of Florida Research Foundation, Inc., USA

SOURCE: U.S., 39 pp., Cont.-in-part of U.S. Ser. No. 337.827.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6593147	B1	20030715	US 2000-553662	20000421
US 6025338	A	20000215	US 1996-733230	19961017
US 6251872	B1	20010626	US 1997-953326	19971017
US 2002132789	A1	20020919	US 2002-62994	20020131

PRIORITY APPLN. INFO.:

US 1996-733230	A2	19961017
US 1997-953326	A3	19971017
US 1999-130725P	P	19990422
US 1999-337827	B2	19990622
US 2000-553662	A3	20000421
US 2001-269944P	P	20010220

AB The authors disclose nucleic acid and polypeptides of protective antigens of Cowdria ruminantium and Ehrlichia canis for use in vaccines to induce immunity in animals or humans against rickettsial diseases. Also disclosed are methods of using these polypeptides to detect antibodies to these pathogens.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 2 OF 18 USPATFULL on STN
ACCESSION NUMBER: 2003:64302 USPATFULL
TITLE: Ehrlichia ruminantium **polypeptides**, antigens, **polynucleotides**, and methods of use

INVENTOR(S): **Barbet, Anthony F.**, Archer, FL, UNITED STATES
Whitmire, William M., Hamilton, MT, UNITED STATES
Kamper, Sondra M., Round Rock, TX, UNITED STATES
Simbi, Bigboy H., Harare, ZIMBABWE
Ganta, Roman Reddy, Manhattan, KS, UNITED STATES
Moreland, Annie L., Trenton, FL, UNITED STATES

Mwangi, Duncan M., Nairobi, KENYA
McGuire, Travis C., Pullman, WA, UNITED STATES
Mahan, Suman M., Harare, ZIMBABWE

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003044422	A1	20030306
APPLICATION INFO.:	US 2002-81051	A1	20020220 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-269944P	20010220 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, 2421 N.W. 41ST STREET, SUITE A-1, GAINESVILLE, FL, 326066669
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 7086
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Described are nucleic acid vaccines containing genes to protect animals or humans against rickettsial diseases. Also described are **polypeptides** and methods of using these polypetides to detect antibodies to pathogens.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2002:658268 HCAPLUS
DOCUMENT NUMBER: 137:198238
TITLE: Antigens of Ehrlichia ruminantium and genes encoding them and their use in vaccines against Rickettsia
INVENTOR(S): **Barbet, Anthony F.; Whitmire, William W.; Kamper, Sondra M.; Simbi, Bigboy H.; Ganta, Roman Reddy; Moreland, Annie L.; Mwangi, Duncan M.; McGuire, Travis C.; Mahan, Suman M.**
PATENT ASSIGNEE(S): University of Florida, USA
SOURCE: PCT Int. Appl., 206 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2002066652	A2	20020829	WO 2002-US5772	20020220

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003044422	A1	20030306	US 2002-81051	20020220

PRIORITY APPLN. INFO.: US 2001-269944P P 20010220

AB Described are nucleic acid vaccines contg. genes to protect animals or humans agains rickettsial diseases. Also described are **polypeptides** and methods of using these **polypeptides** to detect antibodies to pathogens. Genes for antigens were identified by screening expression libraries in the com. **vector** pGEM-7zf(+) with immune serum. Escherichia coli synthesizing antigens were used in vaccines against a lethal inoculum of E. ruminantium. Control mice showed 0-10% survival and vaccinated mice showed 60-89% survival depending upon the antigen used in the vaccine. Data from BLAST queries of cloned sequences are presented.

L36 ANSWER 4 OF 18 USPATFULL on STN

ACCESSION NUMBER: 2002:243598 USPATFULL

TITLE: Nucleic acid vaccines against rickettsial diseases and methods of use

INVENTOR(S): **Barbet, Anthony F.**, Archer, FL, UNITED STATES
Bowie, Michael V., Gainesville, FL, UNITED STATES
Ganta, Roman Reddy, Manhattan, KS, UNITED STATES
Burridge, Michael J., Gainesville, FL, UNITED STATES
Mahan, Suman M., Harare, ZIMBABWE
McGuire, Travis C., Pullman, WA, UNITED STATES
Rurangirwa, Fred R., Pullman, WA, UNITED STATES
Moreland, Annie L., Trenton, FL, UNITED STATES
Simbi, Bigboy H., Harare, ZIMBABWE
Whitmire, William M., Hamilton, MT, UNITED STATES
Alleman, Arthur R., Alachua, FL, UNITED STATES

NUMBER	KIND	DATE

PATENT INFORMATION: US 2002132789 A1 20020919
APPLICATION INFO.: US 2002-62994 A1 20020131 (10)
RELATED APPLN. INFO.: Division of Ser. No. US 2000-553662, filed on 21 Apr 2000, PENDING Continuation-in-part of Ser. No. US 1999-337827, filed on 22 Jun 1999, PENDING Division of Ser. No. US 1997-953326, filed on 17 Oct 1997, GRANTED, Pat. No. US 6251872 Continuation-in-part of Ser. No. US 1996-733230, filed on 17 Oct 1996, GRANTED, Pat. No. US 6025338

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-130725P	19990422 (60)
	US 2001-269944P	20010220 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SALIWANCHIK LLOYD & SALIWANCHIK, A PROFESSIONAL ASSOCIATION, 2421 N.W. 41ST STREET, SUITE A-1, GAINESVILLE, FL, 326066669
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1806
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Described are nucleic acid vaccines containing genes to protect animals or humans against rickettsial diseases. Also described are **polypeptides** and methods of using these **polypeptides** to detect antibodies to pathogens.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 5 OF 18 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
DUPLICATE 3

ACCESSION NUMBER: 2001-424487 [45] WPIDS
CROSS REFERENCE: 1998-251232 [22]; 2000-679675 [66]; 2002-723186 [78]
DOC. NO. CPI: C2001-128436
TITLE: New MAP2 genes and **polypeptides** useful as vaccines for conferring immunity to human and animal rickettsial diseases, e.g. heartwater, or as molecular markers in nucleic acid analysis procedures.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): ALLEMAN, A R; **BARBET, A F**; BOWIE, M V; BURRIDGE, M J; **GANTA, R R**; **MAHAN, S M**; **MCGUIRE, T C**; NYIKA, A; RURANGIRWA, F R
PATENT ASSIGNEE(S): (UYFL) UNIV FLORIDA
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6251872	B1	20010626	(200145)*		30

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6251872	B1 CIP of	US 1996-733230	19961017
		US 1997-953326	19971017

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 6251872	B1 CIP of	US 6025338

PRIORITY APPLN. INFO: US 1997-953326 19971017; US 1996-733230 19961017

AN 2001-424487 [45] WPIDS

CR 1998-251232 [22]; 2000-679675 [66]; 2002-723186 [78]

AB US 6251872 B UPAB: 20021209

NOVELTY - An isolated **polynucleotide** (I) encoding a MAP2 **polypeptide** (II) having one of the two 205 amino acid sequences fully defined in the specification, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method of inducing an immune response to rickettsial **polypeptide** (II) in an animal comprising administering a composition comprising a carrier and a nucleic acid vaccine **vector** containing an operably linked isolated **polynucleotide** encoding (II);

(2) a composition comprising an isolated **polynucleotide** encoding (II) and a carrier;

(3) a **vector** comprising an isolated **polynucleotide** encoding (II); and

(4) a composition comprising a **vector** containing an isolated **polynucleotide** encoding (II) and a carrier.

ACTIVITY - Antibacterial.

MECHANISM OF ACTION - Vaccine.

A nucleic acid vaccine construct was tested in animals for its ability to protect against death by infection with the rickettsia Cowdria ruminantium. The vaccine construct tested was the MAP1 gene of C. ruminantium inserted into plasmid VCL1010 under the control of the human cytomegalovirus promoter-enhancer and intron A. Seven groups of mice (10 mice/group) were injected twice a week at 2-wk intervals with either 100, 75, 50 or 25 mu g VCL1010 DNA or saline. Two weeks after the last injections, 8 mice/group were challenged with 30 LD50 of C. ruminantium, and clinical symptoms and survival were monitored. VCL1010/MAP1 nucleic acid vaccine increased survival

on challenge in all groups, with a total of 20/30 mice surviving compared to 0/24 in the control groups.

USE - The **polynucleotides** and **polypeptides** are useful as vaccines for conferring immunity to rickettsia infection, including Cowdria ruminantium causing heartwater. The **polynucleotides** may be used to produce the MAP2 **polypeptides**. The **polypeptides** may be used to raise antibodies that are reactive with the **polypeptides**, as molecular markers in nucleic acid analysis procedures.

The nucleic acids may further be used as probes to identify complementary sequences within other nucleic acid molecules or genomes, where such probes can be applied to identify or distinguish infectious strains of organisms in diagnostic procedures or in rickettsial research where identification of particular organisms or strains is needed.

ADVANTAGE - The new vaccine is safer and more effective against rickettsia that elicits complete immune response compared to previously developed vaccines.

Dwg.0/3

L36 ANSWER 6 OF 18 USPATFULL on STN

ACCESSION NUMBER:	2001:214876 USPATFULL
TITLE:	Neutralization-sensitive epitopes of Cryptosporidium parvum
INVENTOR(S):	Perryman, Lance E., Cary, NC, United States Jasmer, Douglas P., Albion, WA, United States Riggs, Michael W., Tucson, AZ, United States **McGuire, Travis C.**, Pullman, WA, United States
PATENT ASSIGNEE(S):	North Carolina State University, Raleigh, NC, United States (U.S. corporation) Arizona Board of Regents on Behalf of The University of Arizona, Tucson, AZ, United States (U.S. corporation) Washington State University Research Foundation, Pullman, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6323020	B1	20011127	
APPLICATION INFO.:	US 1997-916246		19970822	(8)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1996-23440P	19960823	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Navarro, Mark
LEGAL REPRESENTATIVE:	Myers Bigel Sibley & Sajovec
NUMBER OF CLAIMS:	22
EXEMPLARY CLAIM:	1

NUMBER OF DRAWINGS: 8 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 986
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB DNA sequences encoding epitopes to which sporozoite-neutralizing antibodies are directed are provided. Recombinant proteins and synthetic peptides containing Cryptosporidium parvum epitopes for inducing, an antigenic response are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 7 OF 18 USPATFULL on STN
ACCESSION NUMBER: 2001:82896 USPATFULL
TITLE: Serological identification of cattle, sheep or goats infected with anaplasma species
INVENTOR(S): Knowles, Donald P., SE. 1020 Kamiaken, Pullman, WA, United States 99163
McGuire, Travis C., SW. 920 Crestview, Pullman, WA, United States 99163
Palmer, Guy H., 615 SE. High St., Pullman, WA, United States 99163
Davis, William C., NW. 300 Yates, Pullman, WA, United States 99163
McElwain, Terry F., SE. 925 Glen Echo, Pullman, WA, United States 99163

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6242571	B1	20010605
APPLICATION INFO.:	US 1998-99613		19980618 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-730995, filed on 16 Oct 1996, now patented, Pat. No. US 5798219
Continuation of Ser. No. US 1993-156426, filed on 23 Nov 1993, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Duffy, Patricia A.
LEGAL REPRESENTATIVE: Connor, Margaret A., Silverstein, M. Howard, Fado, John D.
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 201
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The subject invention concerns the use of the conserved Anaplasma marginale major surface protein 5 gene and gene product and monoclonal antibody ANAF16C1 for the identification of animals persistently infected with Anaplasma species.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 4

ACCESSION NUMBER: 2001:720214 HCAPLUS
DOCUMENT NUMBER: 136:320066
TITLE: A subset of Cowdria ruminantium genes important for immune recognition and protection
AUTHOR(S): **Barbet, A. F.; Whitmire, W. M.; Kamper, S. M.; Simbi, B. H.; Ganta, R. R.; Moreland, A. L.; Mwangi, D. M.; McGuire, T. C.; Mahan, S. M.**
CORPORATE SOURCE: Department of Pathobiology, University of Florida, Gainesville, FL, USA
SOURCE: Gene (2001), 275(2), 287-298
CODEN: GENED6; ISSN: 0378-1119
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cowdria ruminantium causes the tick-borne rickettsial disease of heartwater, which is devastating to livestock prodn. in sub-Saharan Africa. Current diagnosis and control methods are inadequate. A subset of genes was identified and sequenced encoding recombinant antigens recognized by antibody and peripheral blood mononuclear cells from immune ruminants. The identified genes include many with significant similarity to those of Rickettsia prowazekii, genes predicted to encode different outer membrane proteins and lipoproteins and a gene contg. an unusual tandem repeat structure. Evidence is presented for immune protection by recombinant antigens in a mouse model of C. ruminantium infection. These data identify new recombinant antigens for evaluation in vaccines and diagnostic tests to control heartwater.
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 2000:772767 HCAPLUS
DOCUMENT NUMBER: 133:334047
TITLE: Nucleic acid vaccines against rickettsial diseases and methods of use
INVENTOR(S): Barbet, Anthony F.; Bowie, Michael V.; **Ganta, Roman Reddy**; Burridge, Michael J.; **Mahan, Suman M.**; **McGuire, Travis C.**; Rurangirwa, Fred R.; **Moreland, Annie L.**; **Simbi, Bigboy H.**; **Whitmire, William W.**; Alleman, Arthur R.
PATENT ASSIGNEE(S): University of Florida, USA
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000065063	A2	20001102	WO 2000-US10886	20000421
WO 2000065063	A3	20010412		

W: AU, TZ, ZA
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1171606	A2	20020116	EP 2000-930134	20000421

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: US 1999-130725P P 19990422
WO 2000-US10886 W 20000421

AB Described are nucleic acid vaccines contg. genes to protect animals or humans against rickettsial pathogens, Rickettsia, Ehrlichia, Anaplasma, and Cowdria species. Also described are polypeptides and methods of using these polypeptides to detect antibodies to pathogens. A DNA vaccine (VCL1010/MAP1) contg. the major antigenic protein 1 (MAP1) gene of Cowdria ruminantium, driven by the human cytomegalovirus (HCMV) enhancer-promoter, was injected i.m. into 8-10 wk-old female DBA/2 mice after treating them with 50 .mu.L/muscle of 0.5% bupivacaine three days previously. Up to 75% of the immunized mice seroconverted and reacted with C. ruminantium antigen blots. Splenocytes from immunized mice, but not from control mice, proliferated in response to the recombinant MAP1 and to C. ruminantium antigens in in vitro lymphocyte proliferation tests. These proliferating cells secreted IFN-gamma and IL-2 at concns. ranging from 610 pg/mL to 1290 pg/mL and from 152 pg/mL to 310 pg/mL, resp. Only up to 45 pg/mL and 42 pg/mL of IFN-gamma and IL-2, resp., were detected in supernatants of splenocytes from control mice. In expts. testing different VCL1010/MAP1 DNA vaccine dose regimens (25-100 .mu.g/dose, two or four immunizations), survival rates of 23% to 88% (35/92 survivors/total in all VCL1010/MAP1 immunized groups) were obsd. on challenge with a LD of cell culture-derived C. ruminantium organisms. In contrast, survival rates of 0% to 3% (1/144 survivors/total in all control groups) were recorded for control mice. This study demonstrates that MAP1 is a protective antigen and validates the concept of DNA vaccines against heartwater. MAP1 homolog genes of E. chaffeensis and E. canis, Variable Surface Antigen (VSA) genes, were cloned and sequenced. Five addnl. genes giving protection as DNA vaccine, Cowdria ruminantium map2, 1hworf3, 4hworf1, 18hworf1, and 3gdorf3, were also cloned and sequenced.

L36 ANSWER 10 OF 18 USPATFULL on STN
ACCESSION NUMBER: 2000:18423 USPATFULL
TITLE: Nucleic acid vaccines against rickettsial diseases and methods of use
INVENTOR(S): **Barbet, Anthony F.**, Archer, FL, United

States
Ganta, Roman Reddy, Gainesville, FL, United States
Burridge, Michael J., Gainesville, FL, United States
Mahan, Suman M., Harare, Zimbawe

PATENT ASSIGNEE(S): University of Florida, Gainesville, FL, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6025338		20000215
APPLICATION INFO.:	US 1996-733230		19961017 (8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Allen, Marianne P.
LEGAL REPRESENTATIVE: Saliwanchik, Lloyd & Saliwanchik
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 663
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Described are nucleic acid vaccines containing MAP1-related genes to protect animals or humans against rickettsial diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 11 OF 18 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2000400432 EMBASE
TITLE: Equine infectious anaemia virus proteins with epitopes most frequently recognized by cytotoxic T lymphocytes from infected horses.
AUTHOR: **McGuire T.C.**; Leib S.R.; Lonning S.M.; Zhang W.; Byrne K.M.; Mealey R.H.
CORPORATE SOURCE: T.C. McGuire, Dept. Veterinary Microbiol./Pathol., Washington State University, Pullman, WA 99164-7040, United States. mcguiret@vetmed.wsu.edu
SOURCE: Journal of General Virology, (2000) 81/11 (2735-2739).
Refs: 26
ISSN: 0022-1317 CODEN: JGVIAY
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
026 Immunology, Serology and Transplantation
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Efficacious lentiviral vaccines designed to induce cytotoxic T

lymphocytes (CTL) in outbred populations with a diverse repertoire of MHC class 1 molecules should contain or express multiple viral proteins. To determine the equine infectious anaemia virus (EIAV) proteins with epitopes most frequently recognized by CTL from seven horses infected for 0.5 to 7 years, retroviral **vector** -transduced target cells expressing viral proteins were used in CTL assays. Gag p 15 was recognized by CTL from 100% of these infected horses. p26 was recognized by CTL from 86%, SU and the middle third of Pol protein were each recognized by 43%, TM by 29%, and S2 by 14%. Based on these results, it is likely that a construct expressing the 359 amino acids constituting p 15 and p26 would contain epitopes capable of stimulating CTL in most horses.

L36 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 1999:412236 HCAPLUS
DOCUMENT NUMBER: 131:198351
TITLE: Biased immunoglobulin G1 isotype responses induced in cattle with DNA expressing msp1a of Anaplasma marginale
AUTHOR(S): Arulkanthan, Appudurai; Brown, Wendy C.; **McGuire, Travis C.**; Knowles, Donald P.
CORPORATE SOURCE: Program in Vector-Borne Diseases, Department of Veterinary Microbiology and Pathology, College of Veterinary Medicine, Washington State University, Pullman, WA, 99164, USA
SOURCE: Infection and Immunity (1999), 67(7), 3481-3487
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Immunization with the native major surface protein 1 (MSP1) (a heterodimer contg. disulfide and noncovalently bonded **polypeptides** designated MSP1a and MSP1b) of the erythrocytic stage of Anaplasma marginale conferred protection against homologous challenge. The MSP1a **polypeptide** possesses a conserved neutralization-sensitive epitope. In the present study, the immune response to DNA-mediated immunization using msp1a was studied. The plasmid pVCL/MSP1a, which encodes the complete msp1a gene of A. marginale under the control of human cytomegalovirus immediate-early enhancer/promoter and intron A, was constructed. The immune responses elicited by immunization with pVCL/MSP1a into cardiotoxin-induced regenerating muscle were evaluated in mice and cattle. Antibody reactive with native MSP1a was detected in pooled sera of immunized BALB/c mice 3 wk following primary immunization. Two calves seroneg. for A. marginale were immunized four times, at weeks 0, 3, 7, and 13, with pVCL/MSP1a. By 8 wk, both calves responded to MSP1a with an antibody titer of 1:100, which peaked at 1:1600 and 1:800 by 16 wk after the initial immunization. Interestingly, immunoblotting with anti-IgG1 and anti-IgG2 specific monoclonal antibodies revealed a restricted IgG1 anti-MSP1a response in both animals. T-lymphocyte lines, established after the fourth

immunization, proliferated specifically against A. marginale homogenate and purified MSP1 in a dose-dependent manner. These data provide a basis for an immunization strategy to direct bovine immune responses by using DNA vaccine **vectors** contg. single or multiple genes encoding major surface proteins of A. marginale.

REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 13 OF 18 USPATFULL on STN

ACCESSION NUMBER: 96:77558 USPATFULL

TITLE: Immunogenic anaplasma marginale surface antigens, compositions, and methods of use

INVENTOR(S): **McGuire, Travis C.**, SW. 920 Crestview, Pullman, WA, United States 99163
Palmer, Guy H., NW. 335 Dillon, Pullman, WA, United States 99163
Barbet, Anthony F., 31 SW. 21st Rd., Archer, FL, United States 32618
Davis, William C., NW. 300 Yates, Pullman, WA, United States 99163

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5549898		19960827
APPLICATION INFO.:	US 1994-228180		19940415 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1993-79971, filed on 18 Jun 1993, now abandoned which is a continuation of Ser. No. US 1992-875554, filed on 27 Apr 1992, now abandoned which is a continuation of Ser. No. US 1989-335178, filed on 6 Apr 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-253143, filed on 4 Oct 1988, now abandoned Ser. No. Ser. No. US 1988-245855, filed on 16 Sep 1988, now abandoned And Ser. No. US 1988-141505, filed on 7 Jan 1988, now abandoned which is a continuation of Ser. No. US 1985-761178, filed on 3 Jul 1985, now abandoned which is a continuation-in-part of Ser. No. US 1985-715528, filed on 25 Mar 1985, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Sidberry, Hazel F.
LEGAL REPRESENTATIVE: Saliwanchik & Saliwanchik
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 37 Drawing Page(s)
LINE COUNT: 2189
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A purified antigenic surface protein of Anaplasma marginale has

been identified, and is capable of inducing immune responses in ruminants which neutralizes virulent Anaplasma marginale. The antigenic surface protein has a molecular weight of about 105,000 daltons, and can be purified by an immunoaffinity chromatography process. The antigen has further utility in diagnostic tests for anaplasmosis. It can be synthesized by **polypeptide** procedures or by genetic engineering. DNA and amino acid sequences have been developed for the antigen according to this invention. The antigen is useful as a vaccine component for protecting mammals against infection by Anaplasma marginale and may be useful for rickettsial organisms other than Anaplasma marginale.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 14 OF 18 USPATFULL on STN

ACCESSION NUMBER:	96:43569 USPATFULL
TITLE:	Cloned Babesia DNA
INVENTOR(S):	McElwain, Terry F., Pullman, WA, United States **McGuire, Travis C.**, Pullman, WA, United States Jasmer, Douglas P., Albion, WA, United States Reduker, deceased, David W., late of Blandford, MA, United States by Alexander W. Reduker, Jr. and Elizabeth F. Reduker, co-personal representatives Goff, Will L., Moscow, ID, United States Stiller, David, Pullman, WA, United States
PATENT ASSIGNEE(S):	The United States of America as represented by the Secratary of Agriculture, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5518916		19960521
APPLICATION INFO.:	US 1994-342480		19941121 (8)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 1992-989616, filed on 14 Dec 1992, now abandoned which is a division of Ser. No. US 1990-504461, filed on 4 Apr 1990, now patented, Pat. No. US 5171685, issued on 15 Dec 1992 which is a continuation-in-part of Ser. No. US 1989-333155, filed on 4 Apr 1989, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Mosher, Mary E.
LEGAL REPRESENTATIVE:	Silverstein, M. Howard, Fado, John D., Connor, Margaret A.
NUMBER OF CLAIMS:	2
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT:	1217

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The subject invention concerns the identification of novel merozoite surface proteins of Babesia bovis. Also disclosed are monoclonal antibodies to these proteins as well as genes which encode for the proteins. The invention further concerns the use of the novel proteins, recombinant DNA clones, and monoclonal antibodies in the detection, treatment, and prophylaxis of babesiosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 15 OF 18 USPATFULL on STN

ACCESSION NUMBER: 95:50252 USPATFULL

TITLE: Immunization against babesiosis using purified surface antigens of Babesia bigemina and similar immunogens

INVENTOR(S): **McGuire, Travis C.**, Pullman, WA, United States
McElwain, Terry F., Pullman, WA, United States
Perryman, Lance E., Pullman, WA, United States
Davis, William C., Pullman, WA, United States

PATENT ASSIGNEE(S): Washington State University, Pullman, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5422428		19950606
APPLICATION INFO.:	US 1991-803636		19911206 (7)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1991-663255, filed on 1 Mar 1991, now patented, Pat. No. US 5209929 which is a continuation of Ser. No. US 1987-31328, filed on 27 Mar 1987, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Nucker, Christine M.
ASSISTANT EXAMINER: Cunningham, Thomas
LEGAL REPRESENTATIVE: Saliwanchik & Saliwanchik
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 1859

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Antigenic surface proteins from the intraerythrocytic merozoite stage of Babesia bigemina have been isolated using cell fusions and monoclonal antibodies produced thereby. The gene encoding a 58 kD surface protein has been identified and the DNA sequence determined and compared with sequences of other known merozoite proteins. Immunization of mammals, such as bovines, with purified isolates induces an immunological response that is effective to reduce pathological effects of babesiosis induced by Babesia bigemina. Diagnostic kits using monoclonal antibodies and

antigenic surface proteins of Babesia bigemina are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 16 OF 18 USPATFULL on STN
ACCESSION NUMBER: 92:103001 USPATFULL
TITLE: Cloning of the Babesia bovis 60 KD antigen
INVENTOR(S): McElwain, Terry F., Pullman, WA, United States
Hines, Stephen A., Gainesville, FL, United States
McGuire, Travis C., Pullman, WA, United States
Palmer, Guy H., Pullman, WA, United States
Jasmer, Douglas P., Albion, WA, United States
Reduker, David W., Pullman, WA, United States
Goff, Will L., Moscow, ID, United States
Perryman, Lance E., Pullman, WA, United States
Davis, William C., Pullman, WA, United States
PATENT ASSIGNEE(S): University of Florida, Gainesville, FL, United States (U.S. corporation)
The United States of America as represented by the United States Department of Agriculture, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5171685		19921215
APPLICATION INFO.:	US 1990-504461		19900404 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ellis, Joan
LEGAL REPRESENTATIVE: Saliwanchik & Saliwanchik
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 3
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 1162
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The subject invention concerns the identification of novel merozoite surface proteins of Babesia bovis. Also disclosed are monoclonal antibodies to these proteins as well as genes which encode for the proteins.

The invention further concerns the use of the novel proteins, recombinant DNA clones, and monoclonal antibodies in the detection, treatment, and prophylaxis of babesiosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L36 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 1991:599799 HCAPLUS
DOCUMENT NUMBER: 115:199799
TITLE: The msp1.beta. multigene family of Anaplasma

marginale: nucleotide sequence analysis of an expressed copy

AUTHOR(S): **Barbet, Anthony F.**; Allred, David R.

CORPORATE SOURCE: Coll. Vet. Med., Univ. Florida, Gainesville, FL, 32611-0633, USA

SOURCE: Infection and Immunity (1991), 59(3), 971-6
CODEN: INFIBR; ISSN: 0019-9567

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A gene for the .beta. subunit of the immunoprotective surface antigen MSP-1 of A. marginale was previously cloned and expressed in Escherichia coli. A nucleic acid probe based on this gene detects A. marginale infection in carrier cattle and in the tick **vector**. The sequence and structural features of the cloned msp1.beta. gene and expressed **polypeptide** are reported here. The gene codes for a **polypeptide** of 756 amino acids that contains domains of tandemly repeated sequence and glutamine-rich regions at the N and C termini. The cloned copy is a member of a multigene family with multiple restriction fragment length polymorphisms in isolates of this rickettsia from different geog. regions. The availability of the sequence will allow use of the polymerase chain reaction in diagnostic assays and the prepn. and testing of different vaccine constructs in cattle.

L36 ANSWER 18 OF 18 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 1990:284882 BIOSIS

DOCUMENT NUMBER: PREV199090015728; BA90:15728

TITLE: MOLECULAR BASIS FOR SURFACE ANTIGEN SIZE POLYMORPHISMS AND CONSERVATION OF A NEUTRALIZATION-SENSITIVE EPITOPE IN ANAPLASMA-MARGINALE.

AUTHOR(S): ALLRED D R [Reprint author]; **MCGUIRE T C**; PALMER G H; LEIB S R; HARKINS T M; MCELWAIN T F; **BARBET A F**

CORPORATE SOURCE: DEP INFECTIOUS DIS, UNIV FLA, GAINESVILLE, FLA 32610, USA

SOURCE: Proceedings of the National Academy of Sciences of the United States of America, (1990) Vol. 87, No. 8, pp. 3220-3224.
CODEN: PNASA6. ISSN: 0027-8424.

DOCUMENT TYPE: Article

FILE SEGMENT: BA

LANGUAGE: ENGLISH

ENTRY DATE: Entered STN: 23 Jun 1990
Last Updated on STN: 23 Jun 1990

AB Anaplasmosis is one of several tick-borne diseases severely constraining cattle production and usage in many parts of the world. Cattle can be protected from anaplasmosis by immunization with major surface protein 1, a surface protein of Anaplasma marginale carrying a neutralization-sensitive epitope. Marked size polymorphisms exist

among different isolates of A. marginale in AmF105 subunit of major surface protein 1, yet all isolates still contain the neutralization-sensitive epitope. To clarify the basis for these observations, the msp1.alpha. gene encoding AmF105 was cloned from four isolates and sequenced. The encoded **polypeptides** share a high degree of overall homology between isolates but contain a domain with various numbers of tandemly repeated sequences and three regions of clustered amino acid substitutions outside the repeat domain. The **polypeptides** size differences are completely explained by the variations in the numbers of tandem repeat units. We have mapped the neutralization-sensitive epitope to a sequence that is present within each repeat unit. These results identify a basis for size polymorphisms of the surface **polypeptide** antigen concomitant with B-cell epitope conservation in rickettsiae.

FILE 'HOME' ENTERED AT 11:00:55 ON 21 NOV 2003

ACCESSION NUMBER: 2002-139910 [18] WPIDS
DOC. NO. CPI: C2002-043131
TITLE: New isolated human lyase polypeptide for diagnosing, treating and preventing e.g. glaucoma, ocular hypertension, stroke, asthma, or gout.
DERWENT CLASS: B04 D16
INVENTOR(S): BAUGHN, M R; BURFORD, N; GANDHI, A R; NGUYEN, D B; PATTERSON, C; RAMKUMAR, J; THANGAVELU, K; THORNTON, M; TRIBOULEY, C M; YAO, M G; YUE, H; ARVIZU, C; THANGVELU, K; THORNTON, M B
PATENT ASSIGNEE(S): (INCY-N) INCYTE GENOMICS INC; (ARVI-I) ARVIZU C; (BAUG-I) BAUGHN M R; (BURF-I) BURFORD N; (GAND-I) GANDHI A R; (NGUY-I) NGUYEN D B; (RAMK-I) RAMKUMAR J; (THAN-I) THANGVELU K; (THOR-I) THORNTON M B; (TRIB-I) TRIBOULEY C M; (YAOM-I) YAO M G; (YUEH-I) YUE H
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002000840	A2	20020103	(200218)*	EN	101
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001066932	A	20020108	(200235)		
EP 1292685	A2	20030319	(200322)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
US 2003121061	A1	20030626	(200343)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002000840	A2	WO 2001-US19166	20010613
AU 2001066932	A	AU 2001-66932	20010613
EP 1292685	A2	EP 2001-944529	20010613
		WO 2001-US19166	20010613
US 2003121061	A1	WO 2001-US19166	20010613
		US 2002-69434	20020718

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001066932	A	Based on	WO 2002000840

Searcher : Shears 308-4994

EP 1292685 A2 Based on WO 2002000840

PRIORITY APPLN. INFO: US 2000-222818P 20000804; US 2000-213383P 20000623; US 2000-215544P 20000630; US 2002-69434 20020718

AN 2002-139910 [18] WPIDS

AB WO 200200840 A UPAB: 20020319

NOVELTY - An isolated human lyase **polypeptide** (I) (HLYA) having a sequence (PS) of 242, 460 or 328 amino acids, given in specification, a naturally occurring **polypeptide** comprising an amino acid sequence having 90 % sequence identity to PS, or a biologically active or immunogenic fragment of PS, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated **polynucleotide** (II) encoding (I), that:

(i) comprises a sequence (NS) of 911, 2064 or 2938 nucleotides, given in the specification;

(ii) is a naturally occurring **polynucleotide** sequence having 90 % identity to NS;

(iii) a **polynucleotide** sequence complementary to (i) or (ii); or

(iv) is an RNA equivalent of (i) - (iii);

(2) a recombinant **polynucleotide** (III) comprising a promoter sequence operably linked to (II);

(3) a cell (IV) transformed with (III);

(4) a transgenic organism comprising (III);

(5) preparation of (I);

(6) an isolated antibody (V) specific to (I);

(7) detecting (D) a target **polynucleotide** (II) in a sample involving:

(a) hybridizing the sample with a probe having 20 contiguous nucleotides, complementary to the target **polynucleotide** and which specifically hybridizes to the target **polynucleotide**, to form a hybridization complex between the probe and the target **polynucleotide** or its fragments;

(b) detecting the hybridization complex; or

(c) amplifying the target **polynucleotide** or its fragments by a polymerase chain reaction (PCR), detecting the presence or absence of the amplified target **polynucleotide** or its fragment; and

(d) optionally, if present, quantitating the target **polynucleotide**;

(8) an isolated **polynucleotide** comprising 60 contiguous nucleotides of (II);

(9) a composition (C1) comprising (I);

(10) a composition (C2) comprising the agonist or antagonist identified using (I);

(11) a composition (VI) comprising (V);

(12) preparing (M1) a polyclonal antibody of (V) or making (M2) a monoclonal antibody of (V);

(13) an antibody (VII) produced by (M1) or (M2); and

(14) a composition comprising (VII) and a **carrier**.

ACTIVITY - Cytostatic; anticonvulsant; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; virucide; antibacterial; antiinflammatory; antidiabetic; ophthalmological; hypotensive; anti-HIV; antiallergic; antianemic; antiasthmatic; antiatherosclerotic; immunosuppressive; dermatological; nephrotrophic; antigout; antithyroid; thyromimetic; osteopathic; antipsoriatic; antirheumatic; antiarthritic; dermatological; antiulcer; fungicide; antiparasitic; protozoacide; tranquilizer; neuroleptic. No biological data is given.

MECHANISM OF ACTION - HLYA expression modulators; gene therapy; HLYA agonist/antagonist.

USE - (I) screens a compound for effectiveness as an agonist or antagonist of (I), that specifically binds to (I), and that modulates the activity of (I). A nucleic acid (II) encoding (I) is screens a compound for effectiveness in altering expression of a target **polynucleotide** which comprises a sequence of NS which involves exposing the sample comprising the target **polynucleotide** to a compound, and comparing the expression of the target **polynucleotide** in the presence of varying amounts of the compound and in the absence of the compound. (II) assesses toxicity of a test compound by treating a biological sample containing nucleic acids with the test compound, hybridizing the nucleic acids of the treated biological sample with a probe comprising 20 contiguous nucleotides of (II), and comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample. A cell (IV) transformed with (II) produces (I) by recombinant techniques. (V) (a chimeric or single-chain antibody, Fab fragment, a F(ab')2 fragment, or a humanized antibody) is used in a diagnostic test for a condition or disease associated with the expression of HLYA in a biological sample by combining the biological sample with (V), and detecting antibody: **polypeptide** complex. (V) is also useful for detecting (I) in a sample or purifying (I) from a sample. A composition (VI) comprising (V) is used for diagnosing a condition or disease associated with the expression of HLYA in a subject. Preferably, the antibody in the composition is labeled. Compositions (C1) and (C2) comprising (I) and an agonist of (I), respectively, are used for treating a disease or condition associated with decreased expression of functional HLYA. (C2) comprising an antagonist of (I) is used for treating a disease or condition associated with overexpression of (I) (all claimed). (I) and (II) are useful in the diagnosis, treatment and prevention of:

(a) immunological disorders e.g. acquired immunodeficiency syndrome (AIDS), allergies, anemia, asthma, atherosclerosis, Crohn's disease, glomerulonephritis, Goodpasture's syndrome, gout, Grave's disease, Hashimoto's thyroiditis, multiple sclerosis, osteoarthritis, osteoporosis, psoriasis, rheumatoid arthritis, scleroderma, systemic lupus erythematosus, ulcerative colitis, and

viral, bacterial, fungal, parasitic, protozoal, and helminthic infections;

(b) cancer e.g. adenocarcinoma, leukemia, lymphoma, and sarcoma;

(c) a neurological disorder e.g. epilepsy, stroke, Alzheimer's disease, dementia, Parkinson's disease, multiple sclerosis, bacterial and viral meningitis, brain abscess, Creutzfeldt-Jakobs disease, Down's syndrome, muscular dystrophy, inherited, metabolic, endocrine and toxic myopathies, myasthenia gravis, mental disorders including mood, anxiety, and schizophrenic disorders, amnesia, diabetic neuropathy, Tourette's disorder, etc; and

(d) an eye disorder e.g. ocular hypertension and glaucoma.

(I) is used for detecting the presence of the disorders. (I), its catalytic or immunogenic fragments are used for screening libraries of compounds in several drug screening assays. (I) is used for analyzing the proteome of a tissue or cell type, and for assessing the toxicity of a test compound. A vector encoding (I) or its fragments is used for treating the disorders. (II) is used for detecting upstream sequences such as promoters and regulatory elements, creating knock out or knock in humanized animals or transgenic animals to model human diseases, and in somatic or germline gene therapy for treating the disorders. (II) is used for generating hybridization probes used in mapping the naturally occurring genomic sequences, and for developing genetic linkage maps, detecting differences in chromosomal location due to translocation, inversion etc. (II) is used for generating a transcript image of a tissue or cell type. Antibodies which bind to (I) are used for diagnosis of disorders characterized by expression of (I) or in assays to monitor patients being treated with HLYA or agonists, antagonists or inhibitors of HLYA. The antibodies are used for assessing toxicity of a test compound.

Dwg.0/0

L10 ANSWER 16 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-219992 [21] WPIDS

DOC. NO. CPI: C2003-055865

TITLE: New nucleic acid molecules encoding a peptide or polypeptide that binds to a portion of an inhibitor of apoptosis protein, useful for inducing apoptosis and identifying inhibitors or enhancers of apoptosis for treating AIDS, or cancer.

DERWENT CLASS: B04 D16

INVENTOR(S): ALNEMRI, E S; FERNANDES-ALNEMRI, T; SRINIVASULA, S M

PATENT ASSIGNEE(S): (UYJE-N) UNIV JEFFERSON THOMAS

COUNTRY COUNT: 100

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002160975	A1	20021031	(200321)*		52

WO 2003010184 A2 20030206 (200321) EN
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ
UA UG US UZ VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002160975 A1	Provisional	US 2001-267966P	20010208
	CIP of	US 2001-939293	20010824
		US 2002-68569	20020206
WO 2003010184 A2		WO 2002-US3553	20020206

PRIORITY APPLN. INFO: US 2001-267966P 20010208; US 2001-939293 20010824; US 2002-68569 20020206

AN 2003-219992 [21] WPIDS

AB US2002160975 A UPAB: 20030328

NOVELTY - An isolated nucleic acid molecule (I) comprising a **polynucleotide** that encodes a **polypeptide** or peptide (P1), or its variants that specifically binds to at least a portion of an inhibitor of apoptosis protein (IAP), is new.

DETAILED DESCRIPTION - An isolated nucleic acid molecule (I) comprising a **polynucleotide** that encodes a **polypeptide** or peptide (P1), or its variants that specifically binds to at least a portion of an inhibitor of apoptosis protein (IAP), is new.

(P1) Ala-Xaa1-Xaa2-Xaa3,

Xaa1 = Val, Thr or Ile;

Xaa2 = Pro or Ala; and

Xaa3 = Gly, Ala, Val, Leu, Ile, Pro, Ser, Thr, Cys, Met, Asn or Gln.

INDEPENDENT CLAIMS are included for:

(1) a peptide or a **polypeptide** (II) comprising:

(a) at least an N terminus sequence of (S1);

(b) a first portion of a procaspase-9 that specifically binds at least a portion of an IAP and a second portion of a procaspase-9 containing a mutated active site, where the peptide or **polypeptide** specifically binds at least a portion of an IAP and lacks cysteine protease activity;

(c) a sequence of (P1), and at least a portion of caspase-3, where the peptide or **polypeptide** exhibits caspase-3 enzymatic activity that is inhibited by an IAP or an IAP Bir3 domain; or

(d) at least a portion of a mutated procaspase-9, which fails to undergo normal processing and possesses wild type caspase-9

enzymatic activity;

(2) a nucleic acid molecule comprising a **polynucleotide** sequence that encodes (II);

(3) an expression **vector** comprising any of the nucleic acid of (2) operatively linked to **regulatory elements**;

(4) a host cell containing the expression **vector** of (3);

(5) an antibody that specifically binds to the peptide or **polypeptide** comprising (I);

(6) an antibody that specifically binds to an epitope located on the N-terminus of a caspase-9-p12;

(7) inducing apoptosis in a cell or stimulating apoptosis in a neoplastic or tumor cell;

(8) identifying an inhibitor or enhancer of caspase-mediated apoptosis;

(9) identifying a compound that inhibits the peptide or **polypeptide** comprising (P1);

(10) a composition comprising any of the nucleic acid of (2), peptides, or expression **vectors** of (3), or an inhibitor or enhancer of apoptosis, and a **carrier**;

(11) producing a compound for inhibiting or enhancing apoptosis in a cell; and

(12) a process for the manufacture of a compound for inhibiting or enhancing apoptosis in a cell.

(S1) is Ala-Thr-Pro-Phe-Gln-Glu-Gly-Leu-Arg-Thr-Phe-Asp-Gln-Leu-Asp; Ala-Val-Pro-Tyr; or Ala-Val-Pro-Ile-Ala-Gln-Lys.

ACTIVITY - Anti-HIV; Nootropic; Neuroprotective; Vasotropic; Cytostatic; Immunosuppressive.

No biological data given.

MECHANISM OF ACTION - Caspase inhibitor; Caspase stimulator.

USE - The nucleic acid molecules and peptides or **polypeptides** are useful for inducing apoptosis and identifying inhibitors or enhancers of apoptosis (claimed) for treating AIDS, neurodegenerative diseases, ischemic injury, cancer, autoimmune diseases.

Dwg.0/20

L10 ANSWER 17 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-507231 [54] WPIDS
DOC. NO. CPI: C2002-144163
TITLE: Administering a non-viral vector encoding a co-stimulatory molecule alongside a peptide or protein T cell epitope, elicits increased response to the antigen and is useful to enhance peptide and protein based vaccines and treatments.
DERWENT CLASS: B04 D16
INVENTOR(S): BERZOFSKY, J; KHLEIF, S
PATENT ASSIGNEE(S): (BERZ-I) BERZOFSKY J; (KHLE-I) KHLEIF S
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2002044948	A1	20020418	(200254)*		20

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2002044948	A1 Provisional	US 2000-189396P	20000315
		US 2001-810310	20010314

PRIORITY APPLN. INFO: US 2000-189396P 20000315; US 2001-810310 20010314

AN 2002-507231 [54] WPIDS

AB US2002044948 A UPAB: 20020823

NOVELTY - Eliciting an immune response in a subject, comprising administering a peptide or protein antigen comprising T cell epitope(s) coordinately with a non-viral **vector** comprising a **polynucleotide** encoding a T cell co-stimulatory molecule, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an immunogenic composition comprising a peptide or protein antigen comprising a T cell epitope, and a non-viral **vector** comprising a **polynucleotide** that encodes a T cell co-stimulatory molecule operably linked to **regulatory elements** necessary for expression of the molecule in eukaryotic cells, formulated in a pharmaceutically acceptable **carrier** or diluent.

ACTIVITY - Immunostimulant.

The HPV16 E7 peptide(49-57), which is an H2Db binding peptide, is immunogenic in C57BL/6 (B6) (H-2b) mice. To enhance the immunogenicity of antigen-peptide vaccines, the antigen-peptide (HPV16 E7 peptide (49-57) was coordinately administered with a DNA plasmid encoding a co-stimulatory molecule (B7-1). The plasmid was constructed to contain the full length B7-1 open reading frame driven by an exemplary, CMV promoter. When the E7 peptide was coordinately administered with the B7-1 co-stimulatory molecule DNA **vector**, the immunogenic effect of the peptide was increased 3-4 times in comparison to the level of CTL stimulation observed when the peptide emulsion was given without the B7-1-encoding **vector**. These results demonstrate that coordinate administration of a co-stimulatory molecule as DNA along with a peptide antigen yields an unexpectedly enhanced immunostimulatory effect.

MECHANISM OF ACTION - Vaccine.

USE - The method is used to elicit an immune response in a subject (claimed), and to supplement and enhance peptide and protein based vaccines and treatment methods (disclosed).

DESCRIPTION OF DRAWING(S) - Immunogenic response of mice to

vaccination with HPV16 E7 peptide alone or in conjunction with B7-1 co-stimulatory molecule DNA **vector**, measured by CTL activity.
Dwg.1/1

L10 ANSWER 18 OF 37 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2002:71758 BIOSIS
DOCUMENT NUMBER: PREV200200071758
TITLE: Method for increasing life-span.
AUTHOR(S): Chalfie, Martin [Inventor]; Taub, James J. [Inventor, Reprint author]; Rothblatt, Jonathan [Inventor]; Ma, Charles [Inventor]; Hahn, Jang-Hee [Inventor]
CORPORATE SOURCE: Neptune, NJ, USA
ASSIGNEE: The Trustees of Columbia University in the City of New York
PATENT INFORMATION: US 6319708 November 20, 2001
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Nov. 20, 2001) Vol. 1252, No. 3. ftp://ftp.uspto.gov/pub/patdata/. e-file.
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 16 Jan 2002
Last Updated on STN: 25 Feb 2002

AB This invention provides a composition comprising an amount of a **polypeptide** effective to increase the life-span of cells wherein the **polypeptide** has the amino acid sequence of a cytosolic catalase and a suitable **carrier**. This invention also provides an isolated nucleic acid molecule encoding a cytosolic catalase. This invention also provides a host **vector** system for the production of a **polypeptide** having the biological activity of catalase which comprises the above-described **vectors** in a suitable host. This invention also provides a method for prolonging cell life, comprising: (a) linking the above-described nucleic acids to a **regulatory element** such that the expression of the above-described nucleic acids is under the control of the **regulatory element**; and (b) introducing the linked nucleic acid into cells for expression of the nucleic acid, thereby prolonging cell life.

L10 ANSWER 19 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-041482 [05] WPIDS
DOC. NO. CPI: C2002-011822
TITLE: Novel soluble polypeptides comprising fragment of Porphyromonas gingivalis PG32 and PG33 proteins, useful for eliciting immune response in subject against P.gingivalis, and for treating or preventing periodontitis.
DERWENT CLASS: B04 D16

INVENTOR(S): BARR, I G; CZAJKOWSKI, L; ROSS, B C
PATENT ASSIGNEE(S): (CSLC-N) CSL LTD
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001083530	A1	20011108	(200205)*	EN	55
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001052042	A	20011112	(200222)		
EP 1276762	A1	20030122	(200308)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
JP 2003531634	W	20031028	(200373)		60

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001083530	A1	WO 2001-AU482	20010427
AU 2001052042	A	AU 2001-52042	20010427
EP 1276762	A1	EP 2001-925217	20010427
		WO 2001-AU482	20010427
JP 2003531634	W	JP 2001-580954	20010427
		WO 2001-AU482	20010427

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001052042	A	Based on	WO 2001083530
EP 1276762	A1	Based on	WO 2001083530
JP 2003531634	W	Based on	WO 2001083530

PRIORITY APPLN. INFO: AU 2000-7182 20000428
AN 2002-041482 [05] WPIDS
AB WO 200183530 A UPAB: 20020123
NOVELTY - A soluble **polypeptide** (I) comprising a fragment of a fully defined Porphyromonas gingivalis (PG) PG32 and PG33 (outer membrane proteins of PG) protein sequence of 390 (S3) and 380 (S4) amino acids respectively, as given in the specification, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a soluble **polypeptide** (II) of the formula X-Y-Z,

where Y is a soluble PG fragment consisting of residues (R) 86-223, 199-322, 191-306, 224-301, 224-306, 281-384 of (S3) or consisting of residues 193-310, 213-380, 286-380, 213-285 or 306-372 of (S4), X and Z are optional and consist of amino acids or peptides which do not substantially adversely affect the solubility of PG fragment;

(2) a soluble PG **polypeptide** (III) consisting essentially of a **polypeptide** having a sequence consisting of residues (R) as described above;

(3) a chimeric or fusion construct (FC) comprising (I), (II), (III);

(4) an isolated DNA molecule (IV) comprising a nucleotide sequence encoding (I), (II), (III);

(5) a recombinant expression **vector** (V) comprising (IV) operably linked to a transcription **regulatory element**;

(6) a cell (VI) comprising (V);

(7) preparation of PG **polypeptide**, e.g., (I), (II), (III);

(8) a composition (VII) for use in raising an immune response directed against PG in a subject, comprises (I), (II), (II) and/or (IV), and a **carrier**;

(9) an antibody (VIII) raised against (I), (II), (III) or FC;

(10) a composition comprising (VIII); and (11) kit comprising (I), (II), (III), FC and/or (VIII).

ACTIVITY - Antibacterial; dental.

Groups of 10 female BALB/c mice (6-8 weeks old) were immunized (20 mu g/dose) subcutaneously with each recombinant protein, PG32 (Construct 1 in 0.5 M urea), PG33 (Construct 2 in 2 M urea), PG fragment (PG32 aa224-391) and PG33 fragment (PG33 aa213-380). Control mice were given formalin-killed P.gingivalis cells. The immunizations were given subcutaneously at the base of the tail and occurred four weeks and one week prior to challenge with P.gingivalis. Two days prior to challenge mice were bled from the retrobulbar plexus. BALB/c mice were challenged with 7.5 multiply 109 viable cells of P.gingivalis 33277 subcutaneously into the ventral region of the abdomen. Following challenge, mice were examined daily for the number and size of lesions over a period of seven days. Lesions developed on the abdomen of the mice and around the injection site and the lesions were measured daily. Significant reductions in lesion size were obtained only with vaccination using formalin-killed whole P.gingivalis cells and the fragments from r-PG32 and r-PG33.

MECHANISM OF ACTION - Vaccine; mucosal-associated lymphoid tissues (MALT), stimulator.

USE - (VII) is useful for reducing or preventing the incidence or severity of PG infection in a subject. (VIII) is useful treating or preventing PG infection in a subject which involves passive vaccination of the subject with (VIII). (VIII) is also useful in a diagnostic method for detecting the presence or absence of PG **polypeptide** in a sample which involves contacting the sample with (VIII) under conditions sufficient for the antibody to form an

immune complex with a PG **polypeptide** in the sample, and detecting the presence or absence of an immune complex. (VI) is useful for producing (I), (II), (III) by recombinant techniques. (I), (II), (III) or FC as described above is useful in a diagnostic method for detecting the presence or absence of PG antibody in a sample which involves contacting the sample with the soluble **polypeptide** or FC under conditions sufficient for the soluble fragment of **polypeptide** to form an immune complex with an antibody in the sample and detecting the presence or absence of an immune complex (all claimed). The **polypeptides** are useful for treating, preventing or reducing the severity of periodontitis or in other conditions related to infection with PG. Since periodontal disease has linkage with cardiovascular disease, the **polypeptides** are also useful for reducing the incidence or severity of cardiovascular disease or as an adjunct in treating the cardiovascular disease. (VIII) can be used in oral compositions such as tooth paste, mouthwash, etc.

ADVANTAGE - The **polypeptides** exhibit improved solubility when compared to full-length proteins.

Dwg.0/2

L10 ANSWER 20 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-432888 [46] WPIDS
DOC. NO. NON-CPI: N2001-320774
DOC. NO. CPI: C2001-131008
TITLE: DNA vaccine useful for identifying, preventing, treating bacterial, viral, parasitic, fungal infections and cancer in animals and humans, has polycation conjugated M cell ligand-DNA complex.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): PASCUAL, D W
PATENT ASSIGNEE(S): (RERE-N) RES & DEV INST INC
COUNTRY COUNT: 89
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001049867	A1	20010712	(200146)*	EN	58
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 2001027672	A	20010716	(200169)		
EP 1257654	A1	20021120	(200301)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001049867	A1	WO 2001-US426	20010108
AU 2001027672	A	AU 2001-27672	20010108
EP 1257654	A1	EP 2001-901811	20010108
		WO 2001-US426	20010108

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001027672	A	Based on	WO 2001049867
EP 1257654	A1	Based on	WO 2001049867

PRIORITY APPLN. INFO: US 2000-174786P 20000106
AN 2001-432888 [46] WPIDS
AB WO 200149867 A UPAB: 20010815
NOVELTY - A DNA vaccine composition (I) comprising an M cell specific ligand (MCL), a nucleic acid sequence encoding an immunogen and a nucleic acid binding group (NBM), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid (II) encoding a fusion protein comprising NBM and MCL;

(2) a vector (III) comprising (II);

(3) an isolated polypeptide (IV) comprising NBM and MCL or the expressed product of (III);

(4) a host cell comprising (III);

(5) preparation of (IV);

(6) an isolated antibody that binds to (IV); and

(7) a kit comprising MCL and NBM.

ACTIVITY - Antibacterial; Fungicide; Cytostatic; Anti-HIV; Tuberculostatic; Antileprotic; Protozoacide; Virucide.

MECHANISM OF ACTION - Vaccine.

Intranasal (i.n.) immunization with protein sigma 1-polylysine (PL) conjugate was conducted to enhance induced mucosal IgA responses in mice. The mean endpoint titers (plus or minus SE) for mice immunized i.n. with protein sigma 1-PL-pCMVgp160 and sigma 1-PL-pCMVgp140 or uncomplexed pCMVgp160 and pCMVgp140 was compared. Significant differences between protein sigma 1-PL-pCMVgp160 and sigma 1-PL-pCMVgp140 versus pCMVgp160 and pCMVgp140 were determined by student t-test. Mice were immunized with one of three designated HIV DNA vaccine constructs, i.e. gp160, gp140(c) and gp140(s). Each group received 3 i.n. immunizations either of naked DNA or of the M cell DNA vaccine formulation. The mucosal intestinal IgA response was elevated 10 weeks after the initial immunization when compared to i.n. naked DNA immunization. Thus, the DNA vaccine formulation improved mucosal IgA responses when compared to conventional naked DNA immunization.

USE - (I) is useful for immunizing a host against an immunogen and for assaying for mucosal immunity in an animal, by administering

(I) to an animal free of infection of the infectious agent whose antigen is to be tested, isolating mucosal B cells, T cells, lamina propria isolates, intraepithelial isolates, Peyer's patches cells, lymph nodes, nasal passages, nasal associated lymphoid tissue (NALT), adenoids or vaginal epithelium from the animal and co-incubating the isolated cells with heterologous antigen expressing cells, where lysis of antigen expressing cells is indicative of mucosal immunity in the animal. The method additionally comprises evaluating the animal's cytokine profile (claimed). The vaccine is useful for preventing and treating diseases such as tuberculosis, leprosy, malaria, diphtheria, tetanus, Schistosomiasis, measles, mumps, herpes, AIDS, cancer and influenza in humans, livestocks and wildlife.

ADVANTAGE - The DNA vaccine induces improved mucosal IgA antibody responses and promotes sustained cytotoxic T-lymphocyte responses, thus demonstrating efficient vaccination via the mucosa. Both systemic and mucosal immune responses to the intranasally delivered DNA can be achieved.

Dwg.0/5

L10 ANSWER 21 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-266159 [27] WPIDS
DOC. NO. CPI: C2001-080617
TITLE: Novel secreted factor encoded by clone P00188D12 which is differentially expressed in certain disease states, useful in diagnosing and treating cardiac, renal or inflammatory diseases.
DERWENT CLASS: B04 D16
INVENTOR(S): KAPOUN, A M; STANTON, L W
PATENT ASSIGNEE(S): (SCIO-N) SCIOS INC
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001023564	A1	20010405	(200127)*	EN	71

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000078346 A 20010430 (200142)
EP 1220916 A1 20020710 (200253) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 2001023564 A1	WO 2000-US26544	20000927
AU 2000078346 A	AU 2000-78346	20000927
EP 1220916 A1	EP 2000-968431	20000927
	WO 2000-US26544	20000927

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000078346 A		Based on	WO 2001023564
EP 1220916	A1	Based on	WO 2001023564

PRIORITY APPLN. INFO: US 1999-156280P 19990927
AN 2001-266159 [27] WPIDS
AB WO 200123564 A UPAB: 20010518
NOVELTY - Isolated nucleic acid (II) molecule comprising a poly- or oligonucleotide is new.

DETAILED DESCRIPTION - The poly- or oligonucleotide of (II) is selected from:

(a) a **polynucleotide** encoding a **polypeptide** having at least 80% sequence identity with amino acids 25-236 of (S1);

(b) a **polynucleotide** encoding a **polypeptide** having at least 80% sequence identity with amino acids 25 to 214 of (S1);

(c) a **polynucleotide** encoding amino acids 25 to 236 of (S1), or its transmembrane domain deleted or inactivated variant;

(d) a **polynucleotide** hybridizing under stringent conditions with the complement of the coding region of (S2), and encoding a **polypeptide** having at least one biological activity of the **polypeptide** encoded by PDC (S2);

(e) a **polynucleotide** encoding at least 50 contiguous amino acids from amino acids 25-214 or 236 of (S1), in which the **polynucleotide** encodes a **polypeptide** having a biological activity of the **polypeptide** encoded by PDC (S2);

(f) a **polynucleotide** of (S2);

(g) the complement of a **polynucleotide** of (a)-(f); and

(h) an antisense oligonucleotide capable of hybridizing with, or inhibiting the translation of the mRNA encoded by a gene encoding a **polypeptide** of (S1), or its another mammalian homologue.

INDEPENDENT CLAIMS are also included for the following:

(1) **polypeptide** (I) having:

(a) 80% identity to amino acids (aa) 25-236 of fully defined P00188D12 clone (PDC) aa sequence of 236 aas (S1); or

(b) encoded by nucleic acid hybridizing under stringent condition with complement of coding region of fully defined PDC **polynucleotide** sequence of 874 nucleotides (S2), is new. (I) has biological activity of **polypeptide** encoded by PDC. All

sequences are stated in specification.

(2) a **vector** (III) comprising and capable of expressing (II);

(3) a recombinant host cell (IV) transformed with nucleic acid comprising (I);

(4) a recombinant host cell transformed by (III);

(5) preparation of (I);

(6) an antibody (V) specifically binding (I);

(7) an antagonist or agonist (VI) of (I);

(8) compositions comprising (I), (V) or (VI) in admixture with a **carrier**;

(9) screening a subject for a cardiac, renal or inflammatory disease characterized by the differential expression of the **polypeptide** having a sequence of (S1) or its endogenous homologue involves measuring the expression of the **polypeptide** or its endogenous homologue in the subject and determining the relative expression of the **polypeptide** or the endogenous homologue in the subject compared to its expression in normal subjects, or compared to its expression in the same subject at an earlier stage of development of the cardiac, renal or inflammatory diseases;

(10) an array (VII) comprising one or more oligonucleotides complementary to reference RNA or DNA encoding a protein of (S1) or its another mammalian (e.g. human) homologue, where the reference DNA or RNA sequences are obtained from both a biological sample from a normal subject and a biological sample from a subject exhibiting a cardiac, renal, or inflammatory disease, or from biological samples taken at different stages of a cardiac, renal, or inflammatory disease; and

(11) a diagnostic kit (VIII) for the detection of a cardiac, kidney or inflammatory disease comprising (VII).

ACTIVITY - Cardiant; Antiinflammatory; Antianginal; Antiarrhythmic; Antiarteriosclerotic; Antiatherosclerotic; Nephropathic; Antidiabetic; Immunosuppressive; Antiasthmatic; Antirheumatoid; Antiarthritic; Antibacterial; Osteopathic; Cerebroprotective; Vasotropic; Antiulcer; Nootropic; Neuroprotective. No supporting data is given.

MECHANISM OF ACTION - Antagonist or agonist of the differentially expressed **polynucleotide** sequence of PDC; Gene therapy.

USE - The composition comprising (I) is useful for treating of a cardiac, renal or inflammatory disease. (I), (V), (VI) are also useful for treating cardiac, renal or inflammatory diseases. (I) is also useful for diagnostic purposes for screening a subject for cardiac, renal or inflammatory diseases characterized by differential expression of (S1). (VII) is useful for detecting cardiac, kidney, inflammatory disease in a human patient which involves exposing the array under hybridization conditions to a sample of cDNA probes constructed from mRNA obtained from a biological sample from a corresponding biological sample of a normal patient or from a test patient at a certain stage of a disease,

exposing the array, under hybridization conditions, to a second sample of cDNA probes constructed from mRNA obtained from a biological sample obtained from the test, quantifying any hybridization between the first sample of cDNA probes and the second sample of cDNA probes with the oligonucleotide probes on the array and determining the relative expression of genes encoding the human homologue of the protein of (S1) in the biological samples from the normal patient and the test patient, or in the biological samples taken from the test patient at different stages of the disease (claimed). Thus (I), (V), (VI) are useful for treating cardiac diseases such as congestive heart failure, myocarditis, hypertrophic cardiomyopathy, angina pectoris, mycardial infarction, cardiac arrhythmia, arteriosclerosis, etc., kidney disease such as acute renal failure, renal glucosuria, renal infarction, nephrogenic diabetes insipidus, polycystic kidney disease, hereditary nephritis, etc., inflammatory diseases such as asthma, autoimmune diabetes, tumor angiogenesis, rheumatoid arthritis, osteoarthritis, toxic shock syndrome, asthma, stroke, neural trauma, psoriasis, cerebral malaria, osteoporosis, Crohn's disease, ulcerative colitis, Alzheimer's disease, etc. (II) is used to design probes and primers for rapid analysis of cell, tissue, or peripheral blood samples which assists in detecting and diagnosing a disease, specifically cardiac, kidney or inflammatory disease. Also, the **polynucleotide** sequences are useful to identify and isolate full length gene sequences including **regulatory elements** of gene expression from genomic human DNA libraries. Such sequences are useful in the detection of the diseased genes. (II) is also useful in antisense-mediated gene inhibition. The **polynucleotides** are useful in gene therapy. (I) can be used to identify proteins and genes encoding such proteins. The amino acid sequence obtained can be used as a guide for the generation of oligonucleotide mixtures for screening interactive gene sequences, and to generate antibodies, the **polypeptides** are useful in assays for identifying lead compounds for therapeutically active agents.
Dwg.0/4

L10 ANSWER 22 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-289830 [30] WPIDS
CROSS REFERENCE: 2001-595798 [62]
DOC. NO. CPI: C2001-088700
TITLE: New nucleic acid molecules encoding polypeptides with RNA-directed RNA polymerase enzymatic activity, useful in modulating gene expression in plants, humans and animals, as well as in plant cell/tissue cultures or plant breeding.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): RIEDEL, L; SANGER, H L; SCHIEBEL, W; WASSENEGGER, M
PATENT ASSIGNEE(S): (RIED-I) RIEDEL L; (WASS-I) WASSENEGGER M
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6218142	B1	20010417	(200130)*		31

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6218142	B1	US 1997-811583	19970305

PRIORITY APPLN. INFO: US 1997-811583 19970305
AN 2001-289830 [30] WPIDS
CR 2001-595798 [62]
AB US 6218142 B UPAB: 20011121
NOVELTY - An isolated nucleic acid molecule (I), which encodes a **polypeptide** having the enzymatic activity of an RNA-directed RNA polymerase (RdRP) or encoding its enzymatically active fragment, is new.

DETAILED DESCRIPTION - (I) comprises a nucleic acid that:

(a) codes for a **polypeptide** having a fully defined 1114 amino acid sequence given in the specification;

(b) has the coding region comprising 3731 base pairs (bp) fully defined in the specification;

(c) specifically hybridizes to a complementary strand of (I) as described in (a) or (b) in 0.25 M NaHPO4 pH 7.2; 0.25 M NaCl, 7% SDS (sodium dodecyl sulfate), 1 mM EDTA (ethylene diamine tetraacetate) and 5-20% (w/v) polyethylene glycol (Mr 6-7.5 multiply 103) at 42 deg. C for 4-24 hours; or

(d) has a nucleotide sequence, which is degenerate as a result of the genetic code to a nucleotide sequence of the nucleic acid molecule as defined in (c).

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid molecule comprising at least 15 contiguous nucleotides of (I) or its complementary strand;

(2) a **vector** comprising (I), where the **vector** optionally comprises **regulatory elements** that are operatively linked to (I) and where the **regulatory elements** permit expression of the nucleic acid molecule in prokaryotic and/or eukaryotic host cells;

(3) a host cell comprising the **vector**;

(4) a method (M1) for producing a **polypeptide** having the enzymatic activity of an RNA-directed RNA polymerase or its enzymatically active fragment comprising culturing the host cell and allowing the expression of the **polypeptide**;

(5) a kit comprising (I) or the **vector**;

(6) compositions comprising:

(a) a pharmaceutical **carrier** and a nucleic acid molecule selected from: (I), its complement, or a nucleic acid molecule comprising at least 15 contiguous nucleotides of (I) or its

complement; or

(b) a pharmaceutical **carrier** and the **vector**

; and

(7) a method (M2) for making a composition comprising mixing the pharmaceutical **carrier** or excipient with (I) or the **vector**.

ACTIVITY - None given.

MECHANISM OF ACTION - Gene therapy.

USE - (I) is useful for modulating gene expression in plants, humans and animals. This may lead to various physiological, developmental and/or morphological changes. (I) is especially useful in plant cell or tissue cultures, and in plant breeding. (I) may also be used in detecting RdRP activity or expression, or in identifying proteins that interact with the RdRP or nucleic acids encoding such proteins. Furthermore, (I) is useful in gene therapy, particularly for treating a disease that is caused by the undesirable expression or overexpression of a gene.

Dwg.0/6

L10 ANSWER 23 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2001-604111 [69] WPIDS

DOC. NO. NON-CPI: N2001-450905

DOC. NO. CPI: C2001-179121

TITLE: Novel osteoregulin polypeptide useful for regulating bone homeostasis, adiposity and calcification of atherosclerotic plaques comprises measuring the activity of osteoregulin.

DERWENT CLASS: B04 D16 P14 S03

INVENTOR(S): BROWN, T A; DE WET, J R; GOWEN, L C; HAMES, L M

PATENT ASSIGNEE(S): (PFIZ) PFIZER PROD INC; (BROW-I) BROWN T A; (DWET-I) DE WET J R; (GOWE-I) GOWEN L C; (HAME-I) HAMES L M

COUNTRY COUNT: 28

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 1130098	A2	20010905	(200169)*	EN	90
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
JP 2001321187 A		20011120	(200202)		223
US 2003166239 A1		20030904	(200359)		

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
EP 1130098	A2		EP 2001-301768	20010227
JP 2001321187 A			JP 2001-55757	20010228
US 2003166239 A1		Provisional	US 2000-185617P	20000229
		Provisional	US 2000-234500P	20000922

US 2001-794422 20010227

PRIORITY APPLN. INFO: US 2000-234500P 20000922; US 2000-185617P 20000229; US 2001-794422 20010227

AN 2001-604111 [69] WPIDS

AB EP 1130098 A UPAB: 20011126

NOVELTY - An isolated or purified **polypeptide** (I) comprising a sequence (S1) of 435, 441, 525, 556, 509 or 540 amino acids fully defined in the specification, a naturally occurring amino acid sequence having at least 50%, preferably 90%, identity to S1, or a biologically active fragment or immunogenic fragment of S1, where the **polypeptide** has osteoregulin activity, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a heterologous **polypeptide** (Ia) comprising S1, an amino acid sequence encoded by a **polynucleotide** that hybridizes under highly stringent conditions with a probe having the complement of the coding sequence (S2) comprising 1655, 1682, 2019, 2112, 1876 or 1969 nucleotides fully defined in the specification, or a naturally occurring amino acid sequence having at least 50%, preferably 90%, identity to S1, or a biologically active fragment or immunogenic fragment of S1, where the **polypeptide** is produced by expression of a heterologous **polynucleotide** in a host;

(2) an isolated or purified **polynucleotide** (II) comprising a sequence encoding (I), S2, a sequence whose complement hybridizes to the above said sequences under highly stringent conditions, or a variant, fragment, homolog or complement of the above said sequences;

(3) an antibody (Ab) that selectively binds to (I) or (Ia);

(4) a **vector** (III) comprising (II);

(5) a transgenic cell expressing (II);

(6) producing (I);

(7) a genetically-modified non-human mammal (M), where the modification results in a functionally disrupted osteoregulin gene;

(8) a genetically-modified animal cell (IV), where the modification comprises a functionally disrupted osteoregulin gene;

(9) screening for an agent that modulates osteoregulin expression, by contacting an agent with a cell containing a nucleotide sequence comprising an osteoregulin gene **regulatory element** operably linked to a coding sequence, and measuring the expression of the coding sequence, where the difference between the expression in the presence of the agent and in the absence of the agent is indicative that the agent modulates osteoregulin expression;

(10) an osteoregulin modulator (V) for use as a medicament for treating a mammal in need of regulation of bone mass and/or density, adiposity, vascular flexibility, and/or atherosclerotic plaque calcification; and

(11) preparing a pharmaceutical composition, by determining

whether a compound is a modulator of osteoregulin using (I) or by the above said method, and admixing the compound with a pharmaceutically acceptable **carrier**.

ACTIVITY - Osteopathic; antiarteriosclerotic.

MECHANISM OF ACTION - Osteoregulin agonist; osteoregulin antagonist (claimed). No supporting data given.

USE - (I) is useful for screening for an agent that modulates osteoregulin activity, by contacting an agent with an (I) and measuring the activity of osteoregulin, where the difference between osteoregulin activity in the presence of the agent and in the absence of the agent is indicative that the agent modulates the activity. (V) is useful for increasing bone mass, bone density and atherosclerotic plaque stability, for reducing adiposity and for increasing vascular flexibility. (V) is useful in the manufacture of a medicament for, as well as for, treating a mammal in need of regulation of bone mass and/or density, adiposity, vascular flexibility, and/or atherosclerotic plaque calcification (claimed). (I) is useful for regulating bone homeostasis, adiposity and calcification of atherosclerotic plaques. (V) is also useful for treating and preventing osteoporosis, and for stimulating bone repair and regeneration.

Dwg.0/23

L10 ANSWER 24 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-224697 [19] WPIDS
DOC. NO. CPI: C2000-068758
TITLE: Human and murine p15 BID polypeptides with cell death agonist activity are produced by caspase cleavage of BID in cells undergoing FAS or tumor necrosis mediated cell death, useful as modulators of target cell death.
DERWENT CLASS: B04 D16
INVENTOR(S): GROSS, A; KORSMEYER, S J
PATENT ASSIGNEE(S): (UNIW) UNIV WASHINGTON
COUNTRY COUNT: 87
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000011162	A1	20000302	(200019)*	EN	53
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 9952337	A	20000314	(200031)		
EP 1104460	A1	20010606	(200133)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
US 6326354	B1	20011204	(200203)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000011162	A1	WO 1999-US16966	19990728
AU 9952337	A	AU 1999-52337	19990728
EP 1104460	A1	EP 1999-937522	19990728
		WO 1999-US16966	19990728
US 6326354	B1	US 1998-136879	19980819

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9952337	A	Based on	WO 2000011162
EP 1104460	A1	Based on	WO 2000011162

PRIORITY APPLN. INFO: US 1998-137038 19980820; US 1998-136879 19980819

AN 2000-224697 [19] WPIDS

AB WO 200011162 A UPAB: 20000419

NOVELTY - An isolated and purified p15 BID **polypeptide** (I) which has cell death agonist activity, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method for promoting death of a target cell comprises treating the cell with an effective amount of (I);

(2) a method of inhibiting death of a target cell comprises treating the cell with an agent that specifically inhibits caspase cleavage of full length BID (also referred to a p22 BID) at the p15 cleavage site;

(3) a method for inhibiting death of a target cell comprises treating the target cell with a mutant (I) comprising an inactivating mutation in the BH3 domain;

(4) a composition comprising an agent, that specifically inhibits cleavage of p22 BID at the p15 cleavage site;

(5) a composition for inhibiting death of a target cell comprising a mutant (I) lacking cell death agonist activity and a **carrier** suitable for facilitating delivery of the mutant (I) into the cell;

(6) an isolated and purified **polynucleotide** comprising a nucleotide sequence encoding (I);

(7) a **vector** comprising a recombinant **polynucleotide** comprising an expression **regulatory element** operably linked to a nucleotide sequence encoding (I); and

(8) a host cell transformed with the **vector** of (7).

ACTIVITY - Apoptotic.

MECHANISM OF ACTION - Cell death agonist.

Cell death mediated by tumor necrosis factor (TNF) and FAS

signaling pathways includes the generation of (I) which is translocated to the mitochondria where it exerts cell death agonist activity, probably by inducing release of cytochrome C.

USE - (I) is useful in methods for modulating death of a target cell. Mutant (I) comprising an inactivating mutation in the BH3 domain is used in methods for inhibiting death of a target cell. Agents that specifically inhibit caspase cleavage of p22 BID at the p15 cleavage site are also useful for inhibiting death of a target cell.

Dwg.0/8

L10 ANSWER 25 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-182116 [16] WPIDS
DOC. NO. NON-CPI: N2000-134423
DOC. NO. CPI: C2000-056855
TITLE: New isolated bacterial enzymes, used to develop products for the diagnosis, prevention and treatment of Helicobacter infections, particularly H. pylori infections.
DERWENT CLASS: B04 C06 C07 D16 S03
INVENTOR(S): CHEVALIER, C; LABIGNE, A; THIBERGE, J
PATENT ASSIGNEE(S): (INSP) INST PASTEUR
COUNTRY COUNT: 86
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000001825	A1	20000113	(200016)*	EN	95

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9953702	A	20000124	(200027)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000001825	A1	WO 1999-EP4459	19990628
AU 9953702	A	AU 1999-53702	19990628

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9953702	A	Based on	WO 2000001825

PRIORITY APPLN. INFO: US 1998-108213 19980701
AN 2000-182116 [16] WPIDS

AB WO 200001825 A UPAB: 20000330
NOVELTY - A purified **polynucleotide** of Helicobacter (I), comprising a coding sequence selected from a sequence coding for a protein carrying transfer catalytic activity, a sequence coding for a protein carrying gamma -glutamyl residues transfer activity or its fragment, and a sequence which hybridizes with the approx. 2kb nucleotide sequence inserted in plasmid pILL308, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a fragment of **polynucleotide** obtainable by a restriction enzyme from (I);

(2) a purified **polynucleotide** comprising a coding sequence selected from a sequence coding for a protein carrying transfer catalytic activity, and a sequence coding for a protein carrying gamma -glutamyl residues transfer activity such as is expressed by H. pylori;

(3) a purified **polynucleotide** of (I), (1) or (2) that is modified by deletion, addition, substitution, or inversion of one or more nucleotides such that the functional properties of the protein encoded in these modified sequences is either conserved, attenuated, or deleted, as compared with the properties of the protein gamma -glutamyltranspeptidase (GGT) as expressed by H. pylori;

(4) a recombinant **vector**, plasmid, or phage or virus cosmid, capable of transforming an appropriate host cell, comprising a **polynucleotide** of (I) or (1)-(3), optionally under the control of **regulatory elements** allowing the expression of the **polynucleotide** in the host cell;

(5) plasmid pILL308 carried by the strain of Eschericia coli deposited as CNCM I-1775;

(6) a microorganism strain transformed with at least one **vector** as in (4) or with a **polynucleotide** as in (I), or (1)-(3);

(7) a protein or peptide selected from:

(a) a protein or peptide carrying transfer catalytic activity of the type detected in H. pylori and peptide fragments which correspond, according to the universal genetic code, to (I); and

(b) a protein or peptide carrying gamma -glutamyl residues transfer activity, of the type detected in H. pylori and peptide fragments which correspond, according the universal genetic code, to (I);

(8) a polyclonal or monoclonal antibody directed against all or part of a protein or a peptide or its fragments, as in (6);

(9) a probe for the detection of H. pylori comprising a **polynucleotide** as in (I) or (1)-(3);

(10) a kit for the in vitro screening of the possible presence of H. pylori in a sample comprising:

(a) a given quantity of a nucleotide probe as in (8);

(b) an appropriate medium for the formation of a hybridization reaction between the sequence to be detected and the probe; and

(c) a reagent allowing the detection of hybridization complexes

formed between the **polynucleotide** and the probe during the hybridization reaction;

(11) a kit for in vitro screening for the possible presence of H. pylori in a sample, comprising:

(a) a given quantity of an antibody as in (7);

(b) an appropriate environment for the formation of an immunological reaction between at least a part of a protein carrying transfer catalytic activity of gamma -glutamyl residues transfer activity produced by a strain of H. pylori, and the antibody; and

(c) a reagent allowing the detection of immunological complexes formed between at least a part of a protein and the antibody during the immunological reaction;

(12) a process for in vitro screening for the presence of H. pylori, comprising:

(a) optionally amplifying a sequence of (I), or (1)-(3), using primers likely to be linked to the 5' of one strand or the 3' end of the other;

(b) contacting the biological sample with a probe of (9); and

(c) detecting the hybridization complex;

(13) a process for in vitro screening for the presence of H. pylori, comprising

(a) contacting the sample with an antibody of (7); and

(b) detecting the immunological complex formed between the protein carrying transfer catalytic or gamma glutamyl residues transfer activity, produced by H. pylori and the antibody;

(14) a pharmaceutical composition comprising one or more antibodies of (7); and a **carrier**;

(15) an immunogenic composition comprising all or part of the protein of (6), and a carrier;

(16) a protein or peptide as in (6), where the C-terminal domains of the putative large subunit corresponding to amino acids 311-401 and of the putative small subunit corresponding to amino acids 501-615 are species specific;

(17) a polyclonal or monoclonal antibody, directed against all or part of the sequence determined by the amino acids situated at C-terminal domains at position 311-401 equivalent to the large subunit or at position 501-615 equivalent to the small subunit as in (16);

(18) a peptide signal sequence comprising the amino acid sequence: MRRSFLKTIG LGVIALSLGL LSPLSA;

(19) a hybrid molecule comprising a nucleotide sequence encoding a peptide signal sequence as in (16) and a foreign peptide sequence;

(20) a mutated or attenuated H. pylori strain, where the strain is mutated in the GGT gene by insertion of a gene encoding a heterologous epitope into the GGT gene;

(21) a purified 53kD protein of Helicobacter corresponding to a approx. GGT enzyme;

(22) a method for screening molecules capable of specifically inhibiting the activity of Helicobacter GGT without inhibiting or interacting with the activity of human or animal GGT comprising:

(a) contacting a parental Helicobacter with a test molecule in a biological sample;

(b) testing the capacity of the test molecule to inhibit the catalytic activity of Helicobacter GGT;

(c) testing the capacity of the test molecule to inhibit the catalytic activity of a purified human or animal GGT in a biological sample; and

(d) selecting the test molecule that inhibits the activity of Helicobacter GGT but does not inhibit human or animal GGT; and

(23) a molecule capable of inhibiting the enzymatic activity of the GGT of Helicobacter GGT without inhibiting or interacting with the activity of host.

ACTIVITY - Antibacterial; Antiulcer; Antiinflammatory; Cytostatic.

MECHANISM OF ACTION - Vaccine.

USE - The polynucleotides and antibodies can be used for detecting Helicobacter infection, particularly H. pylori (claimed). The polynucleotides can be used for immunizing animals or humans against Helicobacter (claimed). Molecules which inhibit Helicobacter GGT can be used for treating or preventing H. pylori infection (claimed). The products can be used particularly for H. pylori infections associated with chronic gastritis, gastroduodenal ulcers or gastric cancer.

ADVANTAGE - None given.

Dwg.0/8

L10 ANSWER 26 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2000-338616 [29] WPIDS

CROSS REFERENCE: 1995-263864 [34]; 1997-100017 [09]; 1997-372113 [34]; 1998-495860 [42]; 1998-495861 [42]; 1998-495862 [42]; 1998-506369 [43]; 1998-609241 [51]; 1999-153804 [13]; 1999-166570 [14]; 2000-678772 [66]; 2002-582468 [62]; 2003-456547 [43]

DOC. NO. CPI: C2000-102716

TITLE: New human prostate-specific transcriptional regulatory sequence (e.g. prostate-specific enhancer) and polynucleotide comprising the regulatory regions useful for gene therapy, e.g. therapy of benign prostate hyperplasia.

DERWENT CLASS: B04 D16

INVENTOR(S): HENDERSON, D R

PATENT ASSIGNEE(S): (CALY-N) CALYDON INC

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 6057299	A	20000502	(200029)*		52

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
US 6057299	A	CIP of	US 1994-182247	19940113
		CIP of	US 1995-380916	19950130
		CIP of	US 1995-495034	19950627
		CIP of	US 1996-669753	19960626
			US 1996-721690	19960927

FILING DETAILS:

PATENT NO	KIND		PATENT NO
US 6057299	A	CIP of	US 5648478
		CIP of	US 5698443
		CIP of	US 5830686
		CIP of	US 5871726

PRIORITY APPLN. INFO: US 1996-721690 19960927; US 1994-182247 19940113; US 1995-380916 19950130; US 1995-495034 19950627; US 1996-669753 19960626

AN 2000-338616 [29] WPIDS

CR 1995-263864 [34]; 1997-100017 [09]; 1997-372113 [34]; 1998-495860 [42]; 1998-495861 [42]; 1998-495862 [42]; 1998-506369 [43]; 1998-609241 [51]; 1999-153804 [13]; 1999-166570 [14]; 2000-678772 [66]; 2002-582468 [62]; 2003-456547 [43]

AB US 6057299 A UPAB: 20030707

NOVELTY - An isolated **polynucleotide** (I) comprising a prostate-specific enhancer (PSE) operably linked to a **polynucleotide** sequence encoding a heterologous **polypeptide**, is new. (I) is less than 6 kb. PSE comprises a sequence within a fully defined strand comprising 5836 bp. PSE activates transcription of an operably linked nucleotide sequence in a human prostrate cell.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) **vectors** comprising (I), as well as viral **vectors** for transfection of human cells;

(2) a composition for expressing an anti-proliferation construct in a human prostate cell, which expresses prostate-specific antigen (PSA), comprising:

(a) a sterile physiological **carrier**;

(b) a PSE comprising a sequence in a 5836 bp strand;

(c) a DNA sequence, which is operably linked to the PSE, encoding an anti-proliferation molecule; where the molecule comprises an anti-proliferation sequence selected from a toxin gene, an antigen gene, a lymphokine gene, a viral gene, and an antisense sequence; and

(3) expressing a structural gene in a human prostate cell that expresses a PSA comprising:

(a) introducing a construct, which comprises the structural

gene operably linked to the **polynucleotide**, into the prostate cells; and

(b) expressing the structural gene.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Gene therapy. Prostate cancer and benign prostate hyperplasia can be treated, arrested or prevented using gene therapy wherein a DNA construct which comprises a prostate-specific transcriptional **regulatory element** can be delivered to prostate cells for targeted expression of a gene.

USE - The **polynucleotide** and prostate-specific enhancers are useful for the therapy of benign prostate hyperplasia (BPH) and prostatic neoplastic diseases. The enhancers can be used to regulate essential genes of viruses. The methods and compositions are useful for transferring expression constructs, transgenes or homologous recombination constructs into cells, especially in vivo for gene therapy of prostate disease.

Dwg.0/25

L10 ANSWER 27 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-285227 [25] WPIDS
DOC. NO. CPI: C2000-086090
TITLE: Inducible expression system useful for gene therapy comprises a transcriptional activator cassette and a recombinant adenoviral vector containing a transactivatable promoter.
DERWENT CLASS: B04 D16
INVENTOR(S): MEHTALI, M; SORG-GUSS, T; SORG, G T
PATENT ASSIGNEE(S): (TRGE) TRANSGENE SA
COUNTRY COUNT: 23
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
FR 2782732	A1	20000303	(200025)*		52
WO 2000012741	A2	20000309	(200025)	FR	
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA JP US					
AU 9954262	A	20000321	(200031)		
EP 1108051	A2	20010620	(200135)	FR	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
JP 2002523106	W	20020730	(200264)		80

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
FR 2782732	A1	FR 1998-10842	19980828
WO 2000012741	A2	WO 1999-FR2051	19990827
AU 9954262	A	AU 1999-54262	19990827
EP 1108051	A2	EP 1999-940240	19990827

	WO 1999-FR2051	19990827
JP 2002523106 W	WO 1999-FR2051	19990827
	JP 2000-567726	19990827

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9954262	A	Based on	WO 2000012741
EP 1108051	A2	Based on	WO 2000012741
JP 2002523106 W		Based on	WO 2000012741

PRIORITY APPLN. INFO: FR 1998-10842 19980828
AN 2000-285227 [25] WPIDS
AB FR 2782732 A UPAB: 20021105
NOVELTY - Inducible expression system (I) comprises:
(i) nucleotide sequences coding for a eukaryotic or viral transcriptional activator under the control of **regulatory elements** suitable for their expression in a host cell or organism; and
(ii) a recombinant adenoviral **vector** comprising a gene of interest under the control of an inducible promoter capable of being transactivated by the transcriptional activator.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a recombinant adenoviral **vector** (II) comprising:
(i) nucleotide sequences coding for a transcriptional activator under the control of **regulatory elements** suitable for their expression in a host cell or organism; and
(ii) a gene of interest under the control of an inducible promoter capable of being transactivated by the transcriptional activator;
(2) an infectious virus particle (III) comprising (II);
(3) production of the virus particle of (2) by:
(i) introducing (II) into a cell capable of complementing the **vector** in trans;
(ii) culturing the cell to produce the virus particle; and
(iii) recovering the virus particle from the cell culture;
(4) a eukaryotic cell (IV) containing (I), (II) or (III);
(5) a pharmaceutical composition comprising (I), (II), (III) or (IV) and a **carrier**;
(6) a transcriptional activator comprising:
(a) a ligand-binding domain (LBD) and a transactivation domain (TAD) derived from a steroid receptor; and
(b) a heterologous DNA-binding domain (DBD), especially derived from yeast protein Gal4.
ACTIVITY - Anticancer; antiproliferative; antiinfective; antiischemic
MECHANISM OF ACTION - Gene therapy.
USE - (I) can be used for expression of therapeutic antisense RNA molecules, ribozymes or **polypeptides**, especially

selected from chemikines, cytokines, cellular receptors, ligands, clotting factors, CFTR protein, insulin, dystrophin, growth factors, enzymes, enzyme inhibitors, antitumor **polypeptides**, **polypeptides** capable of inhibiting bacterial, parasitic or viral infection, apoptosis-modulating **polypeptides**, cytostatic agents, immunoglobulins, apolipoproteins, cytotoxic products, tumor suppressor gene products, tumor-associated antigens, immunotoxins, angiogenesis inhibitors and markers, especially for gene therapy (including immunotherapy), e.g. of cancer or other proliferative disorders, infections (especially viral infections), genetic disorders (e.g. mucoviscidosis, myopathy, hemophilia or diabetes) and cardiovascular disorders (e.g. restensosis. ischemia or dyslipidemia).

ADVANTAGE - Expression of the gene of interest can be induced as required by administration (preferably oral) of a nontoxic synthetic substance.

Dwg.0/1

L10 ANSWER 28 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1999-458695 [38] WPIDS
DOC. NO. NON-CPI: N1999-343100
DOC. NO. CPI: C1999-134716
TITLE: Differentiation-associated proteins, useful in vaccines and pharmaceuticals to inhibit cell growth.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): FISHER, P B; GOLDSTEIN, N I; HUANG, F
PATENT ASSIGNEE(S): (GENQ-N) GENQUEST INC
COUNTRY COUNT: 82
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9937777	A2	19990729	(199938)*	EN	54
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW					
AU 9923433	A	19990809	(200001)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9937777	A2	WO 1999-US1624	19990126
AU 9923433	A	AU 1999-23433	19990126

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9923433	A	Based on	WO 9937777

PRIORITY APPLN. INFO: US 1998-84650P 19980507; US 1998-72524P 19980126

AN 1999-458695 [38] WPIDS

AB WO 9937777 A UPAB: 19990922

NOVELTY - **Polypeptides** associated with terminal differentiation and growth arrest are new.

DETAILED DESCRIPTION - An isolated **polypeptide** comprises at least a portion of a differentiation-associated protein (DAP) or a variant, where:

(i) the DAP comprises a sequence encoded by a 1951 or 1936 bp sequence (given in the specification); and

(ii) the portion retains at least one immunological and/or biological activity characteristic of the DAP.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated **polynucleotide** (I) encoding a **polypeptide** as above;

(2) an antisense **polynucleotide** comprising a sequence complementary to (I);

(3) an expression **vector** comprising (I);

(4) a host cell transformed or transfected with an expression **vector** as in (3);

(5) a therapeutic composition or vaccine comprising the **polypeptide** above and a **carrier** or immune response enhancer, respectively;

(6) a monoclonal antibody or antigen-binding fragment that specifically binds to a **polypeptide** as above;

(7) recombinant production of a **polypeptide** as above;

(8) a method for identifying a compound/agent that modulates cell growth and/or differentiation;

(9) a **polynucleotide** comprising an endogenous promoter or **regulatory element** of a DAP as above;

(10) a **polynucleotide** comprising a reporter gene under the control of (9);

(11) a cell transformed or transfected with a **polynucleotide** as in (10); and

(12) a method for identifying an agent that modulates the expression of a DAP.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Vaccine; Antibody; DAP Inhibitor.

USE - The DAP, a DAP fragment or a DAP **polynucleotide** can be used to inhibit the development of cancer including prostate, breast, lung and colorectal cancer, melanoma, astrocytoma or glioblastoma multiforme. Determining the level of a DAP or its coding sequence, with e.g. a monoclonal antibody against a DAP or a DAP gene probe, in a tumor sample can be used to determine whether the tumor is malignant. The progression of cancer can be monitored

by measuring DAP expression/activity levels over a period of time. An agent that increases expression of a DAP can also be used to inhibit the development of cancer (all claimed). Dwg.0/4

L10 ANSWER 29 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1999-479051 [40] WPIDS
CROSS REFERENCE: 2000-062456 [03]
DOC. NO. NON-CPI: N1999-356654
DOC. NO. CPI: C1999-140949
TITLE: Differentiation-associated proteins and related polynucleotides, useful for vaccine and pharmaceuticals to inhibit cell growth.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): STALO, W J; FISHER, P B; HUANG, F
PATENT ASSIGNEE(S): (GENQ-N) GENQUEST INC; (MOTI) MOTOROLA INC
COUNTRY COUNT: 83
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9937774	A2	19990729	(199940)*	EN	142
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW					
AU 9924697	A	19990809	(200001)		
US 6266530	B1	20010724	(200146)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9937774	A2	WO 1999-US1549	19990125
AU 9924697	A	AU 1999-24697	19990125
US 6266530	B1	US 1998-87167	19980529

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 9924697	A Based on	WO 9937774

PRIORITY APPLN. INFO: US 1998-87167 19980529; US 1998-73298P 19980126; US 1998-74441P 19980211; US 1998-77804P 19980312; US 1998-79326P 19980325; US 1998-83195P 19980428; US 1998-85609P 19980515; US 1998-86829P 19980526
AN 1999-479051 [40] WPIDS

CR 2000-062456 [03]
AB WO 9937774 A UPAB: 20020117
NOVELTY - **Polypeptides** associated with terminal differentiation and growth arrest are new.

DETAILED DESCRIPTION - An isolated **polypeptide** (P) comprises at least a portion of a differentiation-associated protein (DAP) or a variant, where:

(a) the DAP comprises a sequence encoded by one of 70 **polynucleotides** (ranging from 97 to 903 bp in length, given in the specification); and

(b) the portion retains at least one immunological and/or biological activity characteristic of the DAP.

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated **polynucleotide** (I) encoding (P);

(2) an antisense **polynucleotide** comprising a sequence complementary to (I);

(3) an expression **vector** comprising (I);

(4) a host cell transformed or transfected with an expression **vector** as in (3);

(5) pharmaceutical composition or vaccine comprising (P) and a physiologically acceptable **carrier** or immune response enhancer, respectively;

(6) a vaccine comprising (P) and an immune response enhancer;

(7) a monoclonal antibody or antigen-binding fragment that specifically binds to (P);

(8) recombinant production of (P) comprises culturing the host cell of (4);

(9) a method for identifying a compound/agent that modulates cell growth and/or differentiation;

(10) a **polynucleotide** comprising an endogenous promoter or **regulatory element** of a DAP as above;

(11) a **polynucleotide** comprising a reporter gene under the control of an endogenous promoter or **regulatory element** of a DAP as above;

(12) a cell transformed or transfected with a **polynucleotide** as in (10) or (11); and

(13) a method for identifying an agent that modulates the expression of a DAP.

(14) a method for inhibiting the development of a cancer in a patient, comprises administering (I) to a patient, under conditions such that the **polynucleotide** enters a cell of the patient and is expressed;

(15) a method for determining whether a tumor in a patient is malignant, comprising determining the level of (P) or detecting (I) in a tumor sample obtained from a patient, and therefore determining whether the tumor is malignant;

(16) a method for monitoring the progression of a cancer in a patient, comprising:

(a) detecting, in a biological sample obtained from a patient, an amount of (P) or an amount of an RNA molecule encoding (P) at a

first point in time; at a first point in time;

(b) repeating step (a) at a subsequent point in time; and

(c) comparing the amounts of **polypeptide** or RNA detected in steps (a) and (b), and therefore monitoring the progression of a cancer in the patient;

(17) a diagnostic kit, comprising:

(a) a monoclonal antibody or its fragment; and

(b) a second monoclonal antibody or fragment thereof that binds to:

(i) a monoclonal antibody recited in step (a); or

(ii) (P); where the second monoclonal antibody is conjugated to a reporter group;

(18) a method for identifying a compound that modulates cell growth and/or differentiation

(19) a method for inhibiting the development of a cancer in a patient, comprising the step of administering to a patient an agent that increases expression of (P), and therefore inhibiting the development of a cancer in the patient.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Vaccine; Antibody; DAP Inhibitor.

USE - The DAP, a DAP fragment or a DAP polynucleotide can be used to inhibit the development of cancer including prostate, breast, lung and colorectal cancer, melanoma, astrocytoma or glioblastoma multiforme. Determining the level of a DAP or its coding sequence, with e.g. a monoclonal antibody against a DAP or a DAP gene probe, in a tumor sample can be used to determine whether the tumor is malignant. The progression of cancer can be monitored by measuring DAP expression/activity levels over a period of time. An agent that increases expression of a DAP can also be used to inhibit the development of cancer (all claimed).

Dwg.0/66

L10 ANSWER 30 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1999-395177 [33] WPIDS
DOC. NO. CPI: C1999-116191
TITLE: New p53 regulatory protein (RB18A) useful as, e.g. sources of probes and primers to detect the transcription rate and abundance of RB18A mRNA in lymphocytes.
DERWENT CLASS: B04 D13 D16
INVENTOR(S): FRADE, R
PATENT ASSIGNEE(S): (INRM) INSERM INST NAT SANTE & RECH MEDICALE
COUNTRY COUNT: 22
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9931231	A1	19990624	(199933)*	EN	87
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: CA JP US					
EP 1037992	A1	20000927	(200048)	EN	

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9931231	A1	WO 1998-EP8560	19981214
EP 1037992	A1	EP 1998-966428	19981214
		WO 1998-EP8560	19981214

FILING DETAILS:

PATENT NO	KIND		PATENT NO
EP 1037992	A1	Based on	WO 9931231

PRIORITY APPLN. INFO: EP 1997-403051 19971215
AN 1999-395177 [33] WPIDS
AB WO 9931231 A UPAB: 19990819
NOVELTY - A cellular protein (RB18A) (recognized by PAb1801 monoclonal antibody) is new.

DETAILED DESCRIPTION - The RB18A **polypeptide** (II) comprises a 1566 amino acid (aa) sequence (S1) (given in the specification), or its homolog, or a fragment comprising aa residues 436-1566, 436-1228, 436-927, 1537-1566, 1234-1566, 1234-1406 or 927-1406 of (S1).

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated RB18A nucleic acid (I), comprising a sequence of 5810 nucleotides (nt) (S2) (given in the specification), or its homolog, or a fragment comprising nt 1541-4933, 1541-3919, 1541-3014, 4846- 4933, 3935-4933, 3935-4453 or 3014- 4453 of (S1);

(2) a **vector** for cloning and/or expression of (I);

(3) a host cell transfected by the **vector**;

(4) nucleic acid (NA) sequence which specifically hybridizes with (I);

(5) producing recombinant RB18A **polypeptide** by culturing the host cell of (3);

(6) monoclonal or polyclonal antibodies, or their fragments, chimeric or immunoconjugate antibodies, which are capable of specifically recognizing (II);

(7) use of the antibodies of (6) for detecting or purifying (II) from a biological sample;

(8) a therapeutic composition comprising a purified RB18A **polypeptide** and/or its homologous **polypeptide**, or:

(a) an antibody directed against (II);

(b) an antisense sequence capable of specifically hybridizing with (I);

(c) a RB18A mutant of (12), in association with a **carrier**.

(9) a composition comprising **polynucleotide** sequences encoding:

(a) a first hybrid **polypeptide** comprising a p53 **polypeptide** and an activator domain of a transcriptional activator protein;

(b) a second hybrid **polypeptide** comprising (II) and a DNA-binding domain of the transcriptional activator protein; and

(c) a reporter **polynucleotide** linked to a transcriptional **regulatory element** whose transcriptional activity is dependent upon the presence or absence of a heterodimer comprised of the first and second hybrid **polypeptides**;

(10) identifying agents that inhibit or augment binding of a p53 **polypeptide** to (II) to form heteromulitmers comprising:

(a) performing a heterodimerization assay which includes a p53 **polypeptide** species comprising a binding domain with a RB18A **polypeptide** species comprising a binding domain and an agent;

(b) determining whether the agent inhibits or augments heterodimerization; and

(c) identifying agents which inhibit or augment heterodimerization as candidate p53 modulating agents and candidate pharmaceutical.

(11) inhibitor or augmenter of binding of a p53 **polypeptide** to (II), as determined by the method of (10);

(12) screening RB18A mutants that are useful for preventing and/of treating a disease involving p53 and/or an infection, comprising:

(a) providing RB18A derivative **polypeptides**;

(b) testing these derivatives for their binding affinity to native p53 and/or helicases of infectious agents;

(c) identifying RB18A derivatives which bind to native p53 protein and/or helicases of infectious agents with an affinity superior to isolated (II), as RB18A mutants useful for preventing and/of treating a disease involving p53 and/or an infection;

(13) a RB18A mutant useful for preventing and/of treating a disease involving p53 and/or an infection, as identified by the method of (12), and

(14) preventing and/or treating a disease involving the RB18A protein, comprising administering the composition of (8) to prevent and/or alleviate the disease.

ACTIVITY - DNA-binding; homo-oliogomerization; p53 binding; p53 stabilization.

MECHANISM OF ACTION - None given.

USE - RB18A polynucleotides are useful as sources of probes and primers to detect the transcription rate and abundance of RB18A mRNA in lymphocytes, and for use in in vitro screening methods, and for diagnosis and treatment of neoplastic or preneoplastic pathological conditions and genetic diseases. The RB18A polypeptide activates p53 and interacts with DNA non-specific sequences, and can therefor be used to block the G1 phase of the cell cycle and/or regulate apoptosis, and so control cell growth and apoptose. This makes them

good candidates for antineoplastic therapy. Pharmaceutical compositions comprising RB18A polypeptides or polynucleotides are useful for preventing or treating a variety of human and veterinary diseases, e.g. neoplasia, inflammation, wound healing, graft rejection reperfusion injury, myocardial infarction, stroke, traumatic brain injury, neurodegenerative diseases, aging, ischemia, toxemia, infection, AIDS and hepatitis. Preferably, they are used as antineoplastic compositions, or compositions directed against any other cell proliferation disease, especially in the treatment of colon, breast or ovarian cancer.

ADVANTAGE - None given.

DESCRIPTION OF DRAWING(S) - The figure shows a comparison of the rate of annealing reaction promoted by the RB18A carboxy-terminal domain or by the wild type p53. Reactions were stopped at the indicated time by addition of 5x stop buffer. The different proteins used in the annealing reaction mixtures at the indicated concentration are RB18A carboxy-terminal (amino acids 1234-1566) at 20 nM (squares), wild type p53 at 20 nM (arrows), lysozyme at 500 nM (open circles), and no protein (closed circles). Results were quantified by laser densitometry of the audiograms. Dwg.11/13

L10 ANSWER 31 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1999-404891 [34] WPIDS
DOC. NO. NON-CPI: N1999-301822
DOC. NO. CPI: C1999-119444
TITLE: New CtBP-Interacting Protein (CtIP) polypeptide and polynucleotide.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): CHINNADURAI, G
PATENT ASSIGNEE(S): (UYSL-N) UNIV SAINT LOUIS
COUNTRY COUNT: 22
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9929334	A1	19990617	(199934)*	EN	
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU CA JP US					
AU 9918224	A	19990628	(199946)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9929334	A1	WO 1998-US26505	19981211
AU 9918224	A	AU 1999-18224	19981211

FILING DETAILS:

PATENT NO	KIND	PATENT NO

AU 9918224 A Based on WO 9929334

PRIORITY APPLN. INFO: US 1997-69362P 19971212
AN 1999-404891 [34] WPIDS
AB WO 9929334 A UPAB: 19990825
NOVELTY - An isolated and purified CtBP-Interacting Protein (CtIP) **polypeptide** (I) or a fragment of (Ia), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a composition comprising (I)/(Ia) and a **carrier** to facilitate delivery to a cell;

(2) an isolated and purified **polynucleotide** (II) selected from:

(a) a nucleotide encoding (I) or (Ia);

(b) a nucleotide sequence consisting of at least 15 nucleotides of a fully defined 3247 or 2694 bp cDNA given in the specification; or

(c) a nucleotide sequence complementary to (a) or (b);

(3) an isolated and purified **polynucleotide** which specifically hybridizes to the 3247 or 2694 bp cDNA in (2);

(4) a **vector** comprising expression **regulatory elements** operably linked to a nucleotide sequence encoding a CtIP **polypeptide** or fragment;

(5) a host cell transformed with the **vector**;

(6) an isolated and purified antibody specific to (I) or (Ia);

(7) a method for determining malignancy of a cell in a patient by detecting CtIP expression, where low expression levels indicate malignancy; and

(8) a method for identifying an a gent that inhibits neoplasia of cells, comprising determining whether the agent disrupts binding of CtIP and CtBP.

ACTIVITY - Cytostatic.

USE - (I) or (Ia) are useful for inhibiting neoplasia and determining malignancy (claimed).

Dwg.0/8

L10 ANSWER 32 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 1999-418430 [35] WPIDS
DOC. NO. NON-CPI: N1999-312341
DOC. NO. CPI: C1999-122918
TITLE: Aspergillus nidulans nucleic acids encoding essential proteins AN97, AN80, AN85 and AN17.
DERWENT CLASS: B04 C03 C04 D16 S03
INVENTOR(S): GAVRIAS, V; KOLTIN, Y
PATENT ASSIGNEE(S): (MILL-N) MILLENNIUM PHARM INC; (MILL-N) MILLENIUM PHARM INC
COUNTRY COUNT: 23
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

Baskar, P.
10/081051

-Key terms

(FILE 'HCAPLUS' ENTERED AT 10:39:05 ON 21 NOV 2003)

L1 9392 SEA FILE=HCAPLUS ABB=ON PLU=ON (POLYNUCLEOTIDE OR POLYPROTEIN OR POLYPEPTIDE OR POLY(W)(NUCLEOTIDE OR PEPTIDE OR PROTEIN)) AND VECTOR

L2 114 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND REGULAT?(W)ELEMENT

L3 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (CARRIER OR ADJUVANT)

L3 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:892544 HCAPLUS

TITLE: Methods for producing recombinant adeno-associated virus **vectors** and use for gene therapy

INVENTOR(S): Amalfitano, Andrea; Koeberl, Dwight D.; Sun, Baodong

PATENT ASSIGNEE(S): Duke University, USA

SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003092594	A2	20031113	WO 2003-US13323	20030430

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-376397P P 20020430

AB The present invention provides methods for producing recombinant adeno-assocd. virus (AAV) **vectors** using a novel hybrid adenovirus comprising a recombinant AAV **vector** genome embedded within the adenovirus backbone and their uses as gene therapy **vectors**. Specifically, the recombinant hybrid virus includes (a) a deleted adenovirus **vector** genome comprising the adenovirus 5' and 3' cis-elements for viral replication and encapsidation, and further comprising a deletion in an adenovirus genomic region selected from the group consisting of: (i) the polymerase region, wherein said deletion prevents the expression of a functional polymerase protein, (ii) the preterminal protein region, wherein said deletion prevents the expression of a

functional preterminal protein, and (iii) both the regions of (i) and (ii); and (b) a recombinant AAV **vector** genome flanked by the adenovirus **vector** genome sequences of (a), said recombinant AAV **vector** genome comprising (i) AAV 5' and 3' inverted terminal repeats, (ii) an AAV packaging sequence, and (iii) a heterologous nucleic acid sequence, wherein said heterologous nucleic acid sequence is flanked by the 5' and the 3' AAV inverted terminal repeats of (i).

L3 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:777827 HCAPLUS
DOCUMENT NUMBER: 139:286386
TITLE: Recombinant AAV **vector** compositions and methods for the treatment of choroidal neovascularization
INVENTOR(S): Hauswirth, William W.; Campochiaro, Peter A.; Berns, Kenneth I.
PATENT ASSIGNEE(S): University of Florida Research Foundation, Inc., USA; Johns Hopkins University
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003080648	A2	20031002	WO 2003-US8667	20030320

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-366114P P 20020320

AB The present invention discloses methods for the use of therapeutic **polypeptide**-encoding **polynucleotides** in the creation of transformed host cells and transgenic animals is disclosed. In particular, the use of recombinant adeno-assocd. viral (rAAV) **vector** compns. comprising **polynucleotide** sequences that express one or more mammalian PEDF or anti-angiogenesis **polypeptides** is described. In particular, the invention provides gene therapy methods for the prevention, long-term treatment and/or amelioration of symptoms of a variety of conditions and disorders in a mammalian eye, including,

for example blindness, loss of vision, retinal degeneration, macular degeneration, and related disorders resulting from retinal or choroidal neovascularization in affected individuals.

L3 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:610165 HCAPLUS
DOCUMENT NUMBER: 139:162005
TITLE: Sequences of hepatitis E virus clones and methods of their use in development of vaccines
INVENTOR(S): Emerson, Suzanne U.; Purcell, Robert H.; Zhang, Mingdong; Meng, Xiang-Jin
PATENT ASSIGNEE(S): The Government of the United States of America, as Represented by the Secretary Department of Health and Human Services, USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003063679	A2	20030807	WO 2002-US36096	20021108

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-350122P P 20011109

AB Full-length cDNA clones of the Sar-55 strain of HEV that are infectious in primates are disclosed. The invention relates to HEV nucleic acid sequences, their encoded proteins, any variants thereof, and HEV antibodies for developing vaccines of HEV, and detecting, preventing, and/or treating hepatitis E in a mammal. In particular, the invention provides nucleic acid sequences comprising infectious hepatitis E viruses of the Pakastani (Sar-55) strain. The invention therefore relates to the use of these sequences, and **polypeptides** encoded by all or part of these sequences, in the development of vaccines and diagnostic assays for HEV and in the development of screening assays for the identification of antiviral agents for HEV.

L3 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:532691 HCAPLUS

DOCUMENT NUMBER: 139:95435
TITLE: Modified receptors on cell membranes for the discovery of therapeutic ligands
INVENTOR(S): Schwartz, Thue W.; Martini, Lene; Heydorn, Arne; Jorgensen, Rasmus
PATENT ASSIGNEE(S): 7TM Pharma A/S, Den.
SOURCE: PCT Int. Appl., 122 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003055914	A2	20030710	WO 2002-DK900	20021220
WO 2003055914	A3	20031023		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

DK 2001-1944	A	20011221
DK 2002-113	A	20020122
DK 2002-1043	A	20020703
US 2002-394122P	P	20020703

AB A drug discovery method is provided for selecting a compd. selected from the group consisting of a small org. substance, a biopharmaceutical, or an antibody or part thereof. The method comprises the steps of (i) expressing one or more receptors on a cell membrane, such as, e.g., an exterior cell surface of a cell, (ii) contacting one or more expressed receptors with a test compd. or a selection of test compds. (libraries), and (iii) selecting one or more compds. based on its ability to bind one or more receptors. The step of expressing the one or more receptors comprises capturing one or more receptors on the exterior cell surface in a conformation that predominantly enables binding or interaction with a ligand, and the conformation that predominantly enables binding or interaction with a ligand is provided by modification of one or more receptors by a method comprising at least one of the following: (a) fusion with any protein which keeps the receptor in the desired conformation such as, e.g. an arrestin, a modified arrestin, a G-protein or a modified G-protein, (b) site-directed mutagenesis, and (c) deletion. The receptors may be captured on the exterior cell surface by at least one of the following: (d) interaction of

the receptor with a scaffolding protein, optionally, with a scaffolding protein network and (e) means for blocking receptor internalization, e.g. by co-expression of a mutated dynamin or a modified arrestin or by use of chems. such as, e.g., sucrose and/or Tris. Thus, by coexpressing of either the wild-type receptor or by modifying the receptor by engineering for example a recognition motif for a strong binder into its structure (for example, a PDZ recognition motif at its C-terminal end), and coexpression of this with a scaffolding protein such as PSD-95 or a modified scaffolding protein which interacts with the cytoskeleton at the cell surface or is made to be closely assocd. with the membrane through a lipid anchor, a high level of surface expression can be ensured, which will benefit its use in the drug discovery process. As a result of the strong tendency of the scaffolding proteins to interact with each other, just the cotransfection with one or more appropriate scaffolding proteins or modified scaffolding protein may also lead to the formation of patches with high local concns of the receptor or modified receptor, which will be highly beneficial in the drug discovery process where they are used initially to select binding mols. The method is exemplified by expression of the NK1 receptor in an agonist high-affinity binding form at the surface of transfected cells through fusion with arrestin or the N-terminal fragment of arrestin.

L3 ANSWER 5 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:941815 HCAPLUS
DOCUMENT NUMBER: 138:23650
TITLE: Nucleic acid vaccines encoding agnogene, VP2, VP3 and VP1 capsid proteins for prevention of avian polyomavirus infection in birds of Psittaciformes order
INVENTOR(S): Poet, Steven; Ritchie, Branson W.; Burnley, Victoria; Pesti, Denise
PATENT ASSIGNEE(S): University of Georgia Research Foundation Inc., USA
SOURCE: U.S., 22 pp., Cont.-in-part of U.S. 5,747,045. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6491921	B1	20021210	US 1998-72634	19980504
US 5523088	A	19960604	US 1994-180929	19940113
US 5747045	A	19980505	US 1996-660227	19960603
WO 9956700	A2	19991111	WO 1999-US9690	19990503
WO 9956700	A3	19991216		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1082011 A2 20010314 EP 1999-922781 19990503
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: US 1994-180929 A2 19940113
US 1996-660227 A2 19960603
US 1998-72634 A 19980504
WO 1999-US9690 W 19990503

AB The invention provides a nucleic acid vaccine which is protective against avian polyomavirus infection in a bird which is classified as being a member of the Psittaciformes order comprising a nucleic acid vaccine **vector** comprising a suitable eukaryotic cis-acting transcription and translation regulatory sequence functionally linked to a nucleic acid encoding an immunogenic avian polyomavirus **polypeptide**. The avian polyomavirus immunogens comprise agnogene, VP2, VP3 and VP1 capsid proteins. Methods for preventing avian polyomavirus infection in a bird classified as being a member of the Psittaciformes order, are also provided.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:906474 HCAPLUS
DOCUMENT NUMBER: 138:289
TITLE: Methods of modulating surfactant production
INVENTOR(S): Mason, Robert James; Neben, Steven; Eckart, Michael R.; Longphre, Malinda
PATENT ASSIGNEE(S): Bayer Corporation, USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002095008	A2	20021128	WO 2002-US2728	20020130

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,

TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-265983P P 20010202

AB The present invention provides methods for modulating surfactant prodn. using SREBP/ADD-1 **polypeptides**, and agonists or antagonists that are capable of modulating SREBP/ADD-1 activity. More particularly, the present invention encompasses the use of SREBP/ADD-1 **polypeptides** or agonist or antagonist **polypeptides** for the treatment of a disease or clin. condition where surfactant prodn. is relevant to the causation or treatment of the disease or clin. condition, such as lung diseases, including adult/infant respiratory distress syndrome, acute lung injury, chronic obstructive pulmonary disease (emphysema and chronic bronchitis), asthma, alveolar proteinosis and related pulmonary conditions. The present invention also encompasses pharmaceutical compns. contg. the SREBP/ADD-1 **polypeptides** or agonist or antagonist **polypeptides** and the use of such pharmaceutical compns. for the treatment of the above-mentioned diseases or clin. conditions.

L3 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:428936 HCAPLUS
DOCUMENT NUMBER: 137:16502
TITLE: Protein and cDNA sequences of a novel human gene hVR1d encoding cation ion channel protein expressed in spinal cord and brain
INVENTOR(S): Gaughan, Glen; Feder, John; Nelson, Thomas; Mintier, Gabe; Ramanathan, Chandra
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 156 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002044210	A2	20020606	WO 2001-US45336	20011130

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,

CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002032456	A5	20020611	AU 2002-32456		20011130
US 2003027164	A1	20030206	US 2001-823		20011130
PRIORITY APPLN. INFO.:			US 2000-250587P	P	20001201
			WO 2001-US45336	W	20011130

AB The present invention discloses a novel human gene hVR1d encoding cation ion channel protein expressed in spinal cord and brain. More specifically, the nucleic acid mols. of the invention include novel human gene hVR1d, which expresses two different variants, hVR1d.1 and hVR1d.2, through RNA splicing, in spinal cord and brain tissues and display sequence homol. and structural homol. to the vanilloid and TRP (transient receptor potential) families of cation channel proteins. The proteins and **polypeptides** of the invention directed to this novel human cation channel may be therapeutically valuable targets for drug delivery in the treatment of human diseases that involve calcium, sodium, potassium or other ionic homeostatic dysfunction, such as central nervous system (CNS) disorders, e.g., degenerative neurol. disorders such as Alzheimer's disease or Parkinson's disease, or other disorders such as chronic pain, anxiety and depression, stroke, cardiac disorders, e.g., arrhythmia, diabetes, hypercalcemia, hypocalcemia, hypercalciuria, hypocalciuria, or ion disorders assocd. with immunol. disorders, gastro-intestinal (GI) tract disorders or renal or liver disease. The invention further relates to methods of constructing the expression constructs of different fragments or fusion products of protein hVR1d, expression and purifn. of the protein in prokaryotic and eukaryotic cells, prepg. antibody to this protein, and methods of assessing the protein activity.

L3 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:	2001:843833 HCAPLUS
DOCUMENT NUMBER:	135:367773
TITLE:	Caenorhabditis elegans cytosolic catalase ctl-1 gene and method for increasing life-span
INVENTOR(S):	Chalfie, Martin; Taub, James J.; Rothblatt, Jonathan; Ma, Charles; Hahn, Jang-hee
PATENT ASSIGNEE(S):	Trustees of Columbia University in the City of New York, USA
SOURCE:	U.S., 26 pp. CODEN: USXXAM
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6319708	B1	20011120	US 1997-980241	19971128
PRIORITY APPLN. INFO.:			US 1997-980241	19971128

AB The inventors show that C. elegans contains two catalase genes, ctl-1 and ctl-2, that exist tandemly on chromosome II. One gene, ctl-1, appears to be needed for normal life-span and for the extension of life-span seen in daf-c mutants. One striking feature of the ctl-1 catalase is its localization in the cytosol, not in peroxisomes. The second C. elegans catalase gene, ctl-2, appears to encode the peroxisomal catalase. The inventors suggest that the ctl-1 catalase is needed during periods of starvation, such as the dauer larva, and that its expression in daf-c adults enables them to live longer. As such ctl-1 would represent a true life-span extension gene. This invention provides an isolated nucleic acid mol. encoding a cytosolic catalase ctl-1. This invention provides a compn. comprising an amt. of a **polypeptide** effective to increase the life-span of cells wherein the **polypeptide** has the amino acid sequence of a cytosolic catalase and a suitable **carrier**. This invention also provides a host **vector** system for the prodn. of a **polypeptide** having the biol. activity of catalase which comprises the above-described **vectors** in a suitable host. This invention also provides a method for prolonging cell life, comprising: (a) linking the above-described nucleic acids to a **regulatory element** such that the expression of the above-described nucleic acids is under the control of the **regulatory element**; and (b) introducing the linked nucleic acid into cells for expression of the nucleic acid, thereby prolonging cell life.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:284085 HCAPLUS
DOCUMENT NUMBER: 134:309694
TITLE: Human tumor antigen derived gene-16 protein (TADG-16), its sequence homology to serine proteases, and use in immunizing against carcinomas
INVENTOR(S): O'Brien, Timothy J.; Underwood, Lowell J.; Shigemasa, Kazushi
PATENT ASSIGNEE(S): Board of Trustees of the University of Arkansas, USA
SOURCE: PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001027257	A1	20010419	WO 2000-US28558	20001013

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2003027144 A1 20030206 US 2001-907187 20010717
PRIORITY APPLN. INFO.: US 1999-418527 A 19991014

AB The invention provides a cDNA mol. encoding a human tumor antigen derived gene (TADG-16) protein, which is believed to be a new serine protease based on the protein having sequence characteristic of other serine proteases. The invention also provides isolated DNA which can hybridize to said TADG-16 cDNA, and nucleic acid mols. differing from TADG-16 cDNA in codon sequence due to the degeneracy of the genetic code. The invention further provides: (1) a **vector** contg. said human TADG-16 cDNA mol. linked to **regulatory elements**; (2) a **vector** contg. the human TADG-16 cDNA mol. positioned in reverse orientation relative to **regulatory elements** used for the prodn. of TADG-16 antisense mRNA; and (3) use of said TADG-16 antisense **vector** in inhibiting TADG-16 expression. Still further, the invention provides for use: (1) of a TADG-16-specific probe in Northern blot anal. for detection of TADG-16 mRNA; (2) of an anti-TADG-16 protein antibody in an immunoassay for detection of TADG-16 protein; and (3) of anti-TADG-16 protein antibody in inhibiting the TADG-16 protein. Finally, the invention provides a method for: (1) screening compds. that inhibit the TADG-16 protein and use of identified compd. in treatment of a patient; (2) diagnosing cancer in an individual using mol. genetic techniques; and (3) vaccinating an individual against the TADG-16 protein using immunogenic fragments of TADG-16 and an appropriate **adjuvant**. The cDNA and amino acid sequences of human TADG-16 protein is disclosed, along with fragments of TADG-16 that appear to be immunogenic and able to bind HLA antigens. The invention demonstrated that TADG-16 protein gene mRNA is expressed in normal human testes and in some ovarian tumors.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:594986 HCAPLUS
DOCUMENT NUMBER: 131:227659
TITLE: Vaccines against circovirus infections
INVENTOR(S): Poet, Steven E.; Ritchie, Branson W.; Niagro, Frank D.; Lukert, Phil D.
PATENT ASSIGNEE(S): University of Georgia Research Foundation, Inc., USA

SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9945956	A1	19990916	WO 1999-US5485	19990312
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9930851	A1	19990927	AU 1999-30851	19990312
EP 1064024	A1	20010103	EP 1999-912483	19990312
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6287856	B1	20010911	US 1999-267177	19990312

PRIORITY APPLN. INFO.: US 1998-77890P P 19980313
WO 1999-US5485 W 19990312

AB Vaccine compns. which are protective against circovirus infections, including porcine circovirus and psittacine beak and feather disease virus, in animals, comprising a nucleic acid **vector** comprising a eukaryotic cis-acting transcription/translation regulatory sequence functionally linked to a nucleic acid encoding an animal circovirus **polypeptide**, wherein the nucleic acid lacks a viral origin of replication are disclosed. Nucleic acid **vectors** for the transient expression of one or more circovirus **polypeptides** in a eukaryotic cell comprising a nucleic acid **vector** comprising a eukaryotic cis-acting transcription/translation regulatory sequence functionally linked to the nucleic acids of the invention are described. Methods of preventing a circovirus-assocd. disease in an animal comprising administering to the animal a nucleic acid **vector** comprising a eukaryotic cis-acting transcription/translation regulatory sequence functionally linked to a nucleic acid encoding an animal circovirus **polypeptide**, wherein the nucleic acid lacks a viral origin of replication are also described. Methods of preventing a circovirus-assocd. disease in an animal comprising administering to the animal an immunogenic amt. of one or more animal circovirus **polypeptides** are also described. Also disclosed are nucleic acid and **polypeptide** sequences useful in the vaccine compns. and methods of the invention.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN

THE RE FORMAT

L3 ANSWER 11 OF 11 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1993:470357 HCAPLUS
DOCUMENT NUMBER: 119:70357
TITLE: Method of obtaining a protein exhibiting HIV envelope antigenic properties
INVENTOR(S): Plucienniczak, Andrzej; Nowoslawski, Adam; Stec, Wojciech J.; Dybczynski, Ireneusz; Uznanski, Bogdan; Wilk, Andrzej; Guga, Piotr; Okruszek, Andrzej; Koziolkiewicz, Maria
PATENT ASSIGNEE(S): Polska Akademia Nauk Centrum Badan Molekularnych i Makromolekularnych, Pol.; Akademia Medyczna, Lodz
SOURCE: Pol., 21 pp. Abstracted and indexed from the unexamined application.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 159234	B1	19921130	PL 1988-273724	19880714

PRIORITY APPLN. INFO.: PL 1988-273724 19880714

AB Immunochem. detection of HIV infection can be effected if antigenic material from the virus is available for vaccination of lab. animals so that antibodies can be produced which are specific for the AIDS virus and can be used as probes. Thus, a method is claimed for producing a protein having antigenic properties of HIV due to the fact that it contains amino acid residues 453-518 of the virus envelope protein gp120 fused to a **polypeptide carrier**. The necessary double-stranded DNA is prepd. by ligation of sep. synthesized oligonucleotide fragments and inserted into the DNA of an expression **vector** and introduced into Escherichia coli. After protein is produced having the desired antigenic properties, the antigenic sequence is detached from the **polypeptide carrier**. Plasmid pRA27 is used as the recombinant **vector**. The expression **vector** contains **regulatory elements** of the lac operon and a fragment of the .beta.-galactosidase gene coding for a **polypeptide** 450 amino acid residues long.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 10:41:01 ON 21 NOV 2003)

L7 26354 SEA (POLYNUCLEOTIDE OR POLYPROTEIN OR POLYPEPTIDE OR POLY(W)(NUCLEOTIDE OR PEPTIDE OR PROTEIN))(L) VECTOR
L8 415 SEA L7(L) REGULAT?(W) ELEMENT
L9 37 SEA L8(L)(CARRIER OR ADJUVANT)
L10 37 DUP REM L9 (0 DUPLICATES REMOVED)

Searcher : Shears 308-4994

L10 ANSWER 1 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-636962 [60] WPIDS
DOC. NO. CPI: C2003-174186
TITLE: New viral homologue of mammalian CD30, termed vCD30 polypeptide, and vCD30-encoding nucleic acid, useful for treating or preventing inflammatory conditions, e.g. autoimmune disease, rheumatoid arthritis or multiple sclerosis.
DERWENT CLASS: B04 D16
INVENTOR(S): ALCAMI, A; SARAIVA, M
PATENT ASSIGNEE(S): (UYCA-N) UNIV CAMBRIDGE TECH SERVICES LTD
COUNTRY COUNT: 102
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003066674	A2	20030814	(200360)*	EN	66

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT SD SE SI SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003066674	A2	WO 2003-GB530	20030206

PRIORITY APPLN. INFO: GB 2002-2769 20020206
AN 2003-636962 [60] WPIDS
AB WO2003066674 A UPAB: 20030919
NOVELTY - An isolated viral homologue (vCD30 **polypeptide**) of mammalian CD30, which comprises an amino acid sequence with at least 35% sequence identity with any of three orthopoxvirus vCD30 **polypeptide** sequences, is new. Each orthopoxvirus (i.e. CPV-GRI90, EV Hampstead or EV Naval) vCD30 sequence has 111 amino acids fully defined in the specification.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a fragment of the vCD30 **polypeptide**, which consists of less than 111 amino acids and which binds CD30L;

(2) an isolated nucleic acid encoding the vCD30 **polypeptide** or its fragment;

(3) a **vector** comprising the nucleic acid operably linked to a **regulatory element**;

(4) a host cell comprising the **vector**;

(5) a pharmaceutical composition comprising the vCD30 **polypeptide** or its fragment, and a pharmaceutical excipient;

(6) producing the vCD30 **polypeptide**; and

(7) making a pharmaceutical composition by admixing the vCD30 **polypeptide** with a pharmaceutical excipient, vehicle or **carrier**, and optionally other ingredients.

ACTIVITY - Antiinflammatory; Immunosuppressive; Antidiabetic; Antirheumatic; Antiarthritic; Dermatological; Neuroprotective; Antiulcer. Photomicrographs of hematoxycilin and eosin-stained sections of representative type 1 (lymphocytes, monocytes and neutrophils rich) or type 2 (eosinophil dominated) pulmonary granulomas surrounding antigen coated beads in mice treated with vCD30-Fc or IgG1 indicated that administration of vCD30-Fc to mice caused a significant impaired type 1 cytokine-mediated inflammatory response, with pulmonary granuloma size reduced to greater than 80%.

MECHANISM OF ACTION - CD30-CD30L-Binding Blocker; Th1 Modulator.

USE - The vCD30 **polypeptide** or a nucleic acid is useful for treating an inflammatory condition in the human or animal body. The vCD30 **polypeptide** or nucleic acid is also useful in manufacturing a medicament for the treatment of an inflammatory disorder, particularly a Th1-mediated inflammatory disorder (all claimed), e.g. autoimmune diabetes, autoimmune disease, rheumatoid arthritis, systemic lupus erythematosus, progressive systemic sclerosis, multiple sclerosis, or ulcerative colitis. The vCD30 **polypeptide** or nucleic acid is also useful for preventing any of these inflammatory disorders.

Dwg.0/7

L10 ANSWER 2 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-505284 [47] WPIDS

DOC. NO. CPI: C2003-135121

TITLE: New Alloiococcus otitidis polynucleotides and polypeptides, useful for treating and diagnosing diseases, drug screening assays and monitoring of effects during drug clinical trials.

DERWENT CLASS: B04 D16

INVENTOR(S): FLETCHER, L D; MCMICHAEL, J C; RUSSELL, D P; ZAGURSKY, R J

PATENT ASSIGNEE(S): (AMHP) WYETH HOLDINGS CORP

COUNTRY COUNT: 100

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003048304	A2	20030612	(200347)*	EN	

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ

NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003048304 A2		WO 2002-US36123	20021125

PRIORITY APPLN. INFO: US 2002-426742P 20021118; US 2001-333777P 20011129

AN 2003-505284 [47] WPIDS

AB WO2003048304 A UPAB: 20030723

NOVELTY - An isolated polynucleotide of Alloiococcus otitidis genomic sequence, comprising any of the 3325 sequences, not given in the specification, its complement, degenerate variant or fragment, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) an isolated polypeptide that is encoded by the polynucleotide, comprising any of the 3325 amino acid sequences given in the specification;

(2) an expression vector comprising the novel isolated polynucleotide, its complement, degenerate variant or fragment;

(3) a genetically engineered host cell, transfected, transformed or infected with the vector of (2);

(4) an antibody specific for the polypeptide of (1);

(5) an immunogenic composition comprising the polypeptide, its complement, biological equivalent or fragment, or the polynucleotide that is comprised in the expression vector;

(6) a pharmaceutical composition comprising the polypeptide of (1) and a carrier;

(7) a protein chip comprising an array of the polypeptides of (1), their biological equivalent or fragment;

(8) immunizing against Alloiococcus otitidis by administering to a host the immunogenic composition;

(9) detecting and/or identifying Alloiococcus otitidis in the biological sample;

(10) a kit comprising a container containing the novel polynucleotide, its degenerate variant or fragment, or the antibody of (4); and

(11) producing a polypeptide by culturing the genetically engineered host cell under conditions suitable to produce the polypeptide from the culture.

ACTIVITY - None given.

MECHANISM OF ACTION - Gene therapy.

No biological data is given.

USE - The polynucleotides, polypeptides, antibodies and compositions are useful for treating and diagnosing diseases, drug screening assays and monitoring of effects during drug clinical

trials. The polynucleotides are useful for expressing and detecting Alloiococcus otitidis.
Dwg.0/0

L10 ANSWER 3 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-441350 [41] WPIDS
CROSS REFERENCE: 2002-049338 [06]; 2003-421518 [39]
DOC. NO. CPI: C2003-116814
TITLE: New purified antibody that specifically binds a TNF-related apoptosis-inducing ligand receptor DR4 or DR5, useful for treating cancer, inflammatory disease or autoimmune disease in a subject, e.g. asthma or rheumatoid arthritis.
DERWENT CLASS: B04 D16
INVENTOR(S): BUCHSBAUM, D J; KIMBERLY, R P; KOOPMAN, W J; LOBUGLIO, A F; ZHOU, T
PATENT ASSIGNEE(S): (UABR-N) UAB RES FOUND
COUNTRY COUNT: 101
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003037913	A2	20030508	(200341)*	EN	251

RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003037913	A2	WO 2002-US35333	20021101

PRIORITY APPLN. INFO: US 2001-346402P 20011101
AN 2003-441350 [41] WPIDS
CR 2002-049338 [06]; 2003-421518 [39]
AB WO2003037913 A UPAB: 20031030
NOVELTY - A purified antibody (I) that specifically binds a TNF-related apoptosis-inducing ligand (TRAIL) receptor DR4, is new. The antibody, in its soluble form, has in vivo and in vitro apoptosis-inducing activity in target cells expressing DR4.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(1) selectively inducing apoptosis in target cells expressing DR4 comprising contacting the target cells with a therapeutic quantity of (I);

(2) inhibiting proliferation of target cells expressing DR4 comprising contacting the cells with a therapeutic quantity of (I);

(3) a composition comprising (I) and a pharmaceutical **carrier**;

(4) treating a subject with: (a) cancer comprising administering (I) to the subject, which selectively induces apoptosis of cancer cells in the subject; or (b) an inflammatory or autoimmune disease comprising administering (I) to the subject, which selectively induces apoptosis of target cells having DR4 receptors;

(5) an isolated nucleic acid comprising a nucleotide sequence that encodes a heavy chain or a light chain immunoglobulin of an antibody capable of binding TNF-related apoptosis-inducing ligand (TRAIL) receptor DR4 and capable of inducing apoptosis of a cell with DR4 receptors;

(6) a **vector** comprising the nucleic acid of (6) and a **regulatory element** operably linked to the nucleic acid;

(7) a cultured cell comprising the **vector**; and

(8) a purified **polypeptide** comprising an amino acid sequence of a heavy chain or a light chain immunoglobulin of an antibody capable of binding TRAIL receptor DR4 and capable of inducing apoptosis of a cell with DR4 receptors.

ACTIVITY - Cytostatic; Antiinflammatory; Immunosuppressive; Dermatological; Thyromimetic; Antirheumatic; Antiarthritic; Nephrotropic; Neuroprotective; Antidiabetic; Antiallergic; Antiasthmatic; Antiarteriosclerotic. The TRA-8 anti-human DR5 antibody was administered to mice bearing human xenografts that express the human DR5 molecule. At day 2 after tumor inoculation, mice were inoculated intravenously with TRA-8 (100 mu g). 1321N1 tumor growth was determined by the size and weight of the tumor mass five days after the treatment with TRA-8. Early treatment with a single intravenous dose of 100 mu g of TRA-8 at day one after tumor inoculation completely inhibited the 1321N1 cells from forming a solid tumor. Late treatment with three doses at one week after tumor inoculation reduced tumor weight 4-fold or more. Histological analysis revealed dramatically degenerated tumor tissue in animals treated with TRA-8.

MECHANISM OF ACTION - TNF-Receptor-Antagonist.

USE - The antibodies are useful for selectively inducing apoptosis in target cells expressing DR4, for inhibiting proliferation of target cells expressing DR4, or for treating cancer, inflammatory disease or autoimmune disease in a subject, e.g. systemic lupus erythematosus, Hashimoto's disease, rheumatoid arthritis, graft-versus-host disease, Goodpasture's syndrome, Crohn's disease, multiple sclerosis, diabetes mellitus, allergy, asthma, arteriosclerosis or glomerular nephritis (all claimed). Dwg.0/27

L10 ANSWER 4 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2003-221760 [21] WPIDS

DOC. NO. CPI: C2003-056527
TITLE: New Omi nucleic acids and peptides that bind to an inhibitor of apoptosis proteins, useful for regulating or altering caspase-mediated apoptosis and for treating cancer, tumor, or autoimmune diseases.
DERWENT CLASS: B04 D16
INVENTOR(S): ALNEMRI, E S
PATENT ASSIGNEE(S): (ALNE-I) ALNEMRI E S; (UYJE-N) UNIV JEFFERSON THOMAS
COUNTRY COUNT: 100
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2003006680	A2	20030123	(200321)*	EN	42
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
US 2003073629	A1	20030417	(200329)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003006680	A2	WO 2002-US22658	20020715
US 2003073629	A1 Provisional	US 2001-305378P	20010713
	Provisional	US 2001-340163P	20011214
		US 2002-197634	20020715

PRIORITY APPLN. INFO: US 2001-340163P 20011214; US 2001-305378P 20010713; US 2002-197634 20020715
AN 2003-221760 [21] WPIDS
AB WO2003006680 A UPAB: 20030328
NOVELTY - An isolated nucleic acid molecule (I) comprising a **polynucleotide** encoding an Omi peptide or **polypeptide** having:

(a) a sequence of 4-7 amino acids, and up to 321 contiguous amino acid residues derived from residues 138-458 of a defined sequence of 458 amino acids (II) that specifically binds to a portion of an Inhibitor of Apoptosis Protein (IAP); or

(b) a sequence amino acid residues 134-458 of (II) except that the serine at position 306 is mutated.

DETAILED DESCRIPTION - An isolated nucleic acid molecule (I) comprising a **polynucleotide** encoding an Omi peptide or **polypeptide** having:

(a) a sequence of 4-7 amino acids, and up to 321 contiguous amino acid residues derived from residues 138-458 of a defined sequence of 458 amino acids (II) that specifically binds to a portion of an Inhibitor of Apoptosis Protein (IAP); or

(b) a sequence amino acid residues 134-458 of (II) except that the serine at position 306 is mutated.

The Omi **polypeptide** induces caspase-independent apoptosis, or fails to have serine protease activity. INDEPENDENT CLAIMS are also included for:

(1) an expression **vector** comprising (I) operatively linked to **regulatory elements**;

(2) a host cell containing the expression **vector**;

(3) an isolated peptide or **polypeptide** comprising 4 amino acids up to 321 contiguous amino acid residues derived from residues 138-458 of (II) that specifically binds to a portion of an IAP;

(4) an isolated Omi **polypeptide** comprising:

(a) 4-7 amino acids up to 314 or 321 contiguous amino acid residues derived from residues 138-458 of (II), where the **polypeptide** induces caspase-independent apoptosis or fails to have serine protease activity; or

(b) a sequence of amino acid residues 134-458 of (II) except that the serine at position 306 is mutated and the **polypeptide** fails to have serine protease activity;

(5) a method for inducing caspase-dependent apoptosis in a cell comprises contacting the cell with (I) or with an Omi peptide or **polypeptide**;

(6) methods of identifying an inhibitor or enhancer of caspase-mediated apoptosis;

(7) a method for identifying a compound that inhibits Omi binding to an Omi-binding molecule;

(8) a method for identifying a compound that inhibits Omi binding to a portion of an IAP;

(9) a method for identifying a compound that inhibits Omi binding to a Omi-binding molecule that is not an IAP;

(10) an antibody that specifically binds to a peptide or **polypeptide** above;

(11) an antibody that specifically binds to an epitope located on the N-terminus of Omi;

(12) a composition comprising (I), a peptide or antibody defined above, and a physiological **carrier**;

(13) an isolated nucleic acid molecule comprising a **polynucleotide** having a sequence encoding a functional variant of the Omi peptide or **polypeptide** defined above, where the variant has at least 50% identity of the peptide, or at least 75% or 85% identity of the **polypeptide** up to 75 residues in length, and specifically binds to a portion of an IAP;

(14) a method of producing a compound for inhibiting or enhancing apoptosis, particularly caspase-dependent apoptosis in a cell; and

(15) a process for manufacturing a compound for inhibiting or

enhancing apoptosis, particularly caspase-dependent apoptosis in a cell.

ACTIVITY - Cytostatic; Immunosuppressive; Neuroprotective; Vasotropic.

No biological data given.

MECHANISM OF ACTION - Gene therapy.

USE - The Omi peptides are useful for regulating or altering apoptosis, specifically caspase-mediated apoptosis, and as immunogens for raising antibodies. Enhancers of apoptosis are useful for treating cancers, tumors or for destroying cells that mediate autoimmune diseases. Compositions may also be used for the treatment of diseases associated with inappropriate activation of apoptosis such as neurodegenerative diseases and ischemic injury. The antibodies can be used in isolating Omi peptides, **polypeptides** and their variants, in identifying molecules that interact with Omi peptides and **polypeptides**, and in inhibiting or enhancing the biological activity of Omi peptides and **polypeptides**. MCF-7 and HeLa cells were transfected with full-length antisense Omi cDNA in pRSC-GFP double expression **vector** or an empty pRSC-GFP (-), to reduce the expression of Omi in the transfected cells. Seventy-two hours after transfection, cells were treated with Fas (500 ng/ml, 5 hours), TRAIL (1 micro g/ml, 5 hours) or staurosporine (1 micro g, 5 hours). The percentages of GFP-positive apoptotic cells were determined by fluorescent microscopy after staining with DAPI and propidium iodide. The Omi antisense cDNA reduced significantly (30-35%) the sensitivity of the transfected cells to apoptotic stimuli, indicating that Omi participates together with other apoptotic factors in the overall sensitivity of cells to apoptosis.

Dwg.0/25

L10 ANSWER 5 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-708439 [67] WPIDS

DOC. NO. NON-CPI: N2003-566089

DOC. NO. CPI: C2003-195310

TITLE: New isolated nucleic acid encoding a polypeptide that binds to Ob receptor, useful for treating anorexia, weight loss associated with cancer, reduced appetite associated with aging, obesity and bulimia.

DERWENT CLASS: B04 D16 S03

INVENTOR(S): ADHAM, N; BOROWSKY, B; LEVENS, N; SKODA, R C

PATENT ASSIGNEE(S): (ADHA-I) ADHAM N; (BORO-I) BOROWSKY B; (LEVE-I) LEVENS N; (SKOD-I) SKODA R C

COUNTRY COUNT: 1

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
US 2003073829	A1	20030417	(200367)*		54

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 2003073829 A1		US 1998-116676	19980716

PRIORITY APPLN. INFO: US 1998-116676 19980716
AN 2003-708439 [67] WPIDS
AB US2003073829 A UPAB: 20031017
NOVELTY - An isolated nucleic acid that encodes a polypeptide that binds to the Ob receptor, comprising a sequence of 804 amino acids fully defined in the specification, or a polypeptide comprising a sequence that varies by no more than 15 amino acids, such variations not involving amino acid positions 799-804 and not changing the functional properties of the polypeptide, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

(1) a nucleic acid comprising the nucleic acid cited above, which is linked to a nucleic acid encoding a flag epitope or a polypeptide corresponding to an artificial intracellular domain or transmembrane region of the receptor that is not an Ob receptor;

(2) a purified polypeptide encoded by any of the nucleic acid cited above;

(3) a vector comprising the nucleic acid;

(4) a baculovirus or plasmid vector;

(5) a cell comprising the vector;

(6) an insect cell comprising the vector;

(7) a membrane preparation isolated from the cell;

(8) a nucleic acid probe comprising at least 15 nucleotides, where the probe has a unique sequence corresponding to a sequence present within the nucleic acid sequence from nucleotide number 2395-2412 of a sequence of 2415 bp fully defined in the specification, or its reverse complement;

(9) an antisense oligonucleotide having the unique sequence;

(10) an antibody capable of specifically binding to the polypeptide containing at least one unique sequence corresponding to a sequence present within the amino acid sequence from amino acid number 799-804 of the amino acid sequence cited above;

(11) an antibody capable of competitively inhibiting the binding of the antibody cited above to the polypeptide to which is specifically binds;

(12) a pharmaceutical composition comprising the oligonucleotide effective to reduce the expression of the polypeptide or an antibody that is effective to block binding of a ligand to the polypeptide, and a carrier;

(13) a transgenic non-human mammal expressing the nucleic acid;

(14) a process for identifying a chemical compound that specifically binds to the polypeptide;

(15) a compound identified in the methods;

(16) a pharmaceutical composition comprising the compound or the polypeptide and a carrier;

(17) a process involving competitive binding for identifying a chemical compound that specifically binds to the polypeptide;

(18) a method for screening chemical compounds not known to bind to the polypeptide encoded by the nucleic acid to identify a compound that specifically binds to the polypeptide;

(19) a process for determining whether a chemical compound is an Ob receptor agonist or antagonist;

(20) a method for determining whether a compound modulates leptin activity;

(21) a method for screening compounds to identify a compound that modulates leptin activity;

(22) a method for treating an abnormality in a subject, where the abnormality is alleviated by modulating leptin activity in a subject;

(23) a method for modulating feeding behavior or metabolism;

(24) a method for detecting the expression of the polypeptide by detecting the presence of mRNA coding for the polypeptide, or the presence of the polypeptide;

(25) a method for determining the physiological effects of varying levels of activity of the polypeptides;

(26) a method for diagnosing a predisposition to a disorder associated with the activity of a specific polypeptide allele; and

(27) methods for preparing the purified polypeptides.

ACTIVITY - Anorectic.

No biological data given.

MECHANISM OF ACTION - Ob receptor agonist; Ob receptor antagonist; Gene therapy; Antisense therapy.

USE - The polynucleotides, polypeptides, compositions and methods are useful for treating anorexia, weight loss associated with cancer, reduced appetite associated with aging, obesity or bulimia (claimed).

Dwg.0/11

L10 ANSWER 6 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-156901 [15] WPIDS

DOC. NO. NON-CPI: N2003-123852

DOC. NO. CPI: C2003-040792

TITLE: New Wit 3.0 alpha or beta DNA molecule encoding a protein capable of wound healing, useful for treating wound, improving wound healing and minimizing/preventing abnormal scarring caused by tissue contraction and fibrosis formation.

DERWENT CLASS: B04 D16 P31

INVENTOR(S): NISHIMURA, I; SUKOTJO, C

PATENT ASSIGNEE(S): (NISH-I) NISHIMURA I; (SUKO-I) SUKOTJO C; (REGC) UNIV CALIFORNIA

COUNTRY COUNT: 100

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

WO 2002100250 A2 20021219 (200315)* EN 33
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ
UA UG US UZ VN YU ZA ZM ZW
US 2003092030 A1 20030515 (200335)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002100250 A2		WO 2002-US18828	20020612
US 2003092030 A1	Provisional	US 2001-297720P	20010612
		US 2002-170786	20020612

PRIORITY APPLN. INFO: US 2001-297720P 20010612; US 2002-170786 20020612
AN 2003-156901 [15] WPIDS
AB WO2002100250 A UPAB: 20030303
NOVELTY - A new isolated DNA molecule (I) encoding a protein capable of wound healing comprises:
(a) a sequence comprising 2746 bp (S1), and/or comprising 762 bp (S2), all fully defined in the specification;
(b) a **polynucleotide** encoding a sequence of 195 or 253 amino acids, fully defined in the specification; or
(c) a **polynucleotide** encoding a **polypeptide** encoded by the cDNA of (S1) and/or (S2).
DETAILED DESCRIPTION - A new isolated DNA molecule (I) encoding a protein capable of wound healing comprises:
(a) a sequence having greater than 85% identical with rat Wit 3.0 alpha comprising 2746 bp (S1), and/or beta comprising 762 bp (S2), all fully defined in the specification;
(b) a **polynucleotide** encoding a sequence that is greater than 90% identical to a sequence of 195 or 253 amino acids, fully defined in the specification; or
(c) a **polynucleotide** encoding a **polypeptide** encoded by the cDNA of (S1) and/or (S2).
INDEPENDENT CLAIMS are included for the following:
(1) A **polypeptide** consisting of 215 or 253 amino acids, respectively encoded by (S1) or (S2);
(2) An isolated **polynucleotide** that hybridizes under stringent conditions to (I), where the **polynucleotide** encodes the **polypeptide** cited above, and is upregulated in oral mucosal cells located in or near the edentulous oral mucosal under conditions of wounding including tooth extraction;
(3) A composition comprising (I), and a **carrier**;
(4) A **polynucleotide vector** containing (I);

(5) A **polynucleotide vector** containing (I) in operative association with a nucleotide **regulatory element** which controls expression of the **polynucleotide** in the host cell; and

(6) A cultured genetically host cell containing (I), or the **vector** in (5), where the host cell can be prokaryotic or eukaryotic.

ACTIVITY - Vulnerary. Test details are described but no results are given.

MECHANISM OF ACTION - Gene therapy; Antisense therapy.

USE - The DNA molecule is useful for treating wound, improving wound healing and minimizing/preventing abnormal scarring caused by tissue contraction and fibrosis formation. This is also useful for treating edentulous oral mucosa wound after tooth extraction.

ADVANTAGE - The invention provides improved composition for wound healing, which is locally expressed at or near the region of the wound. It also minimizes undesired effects on non-wound tissues by localizing and limiting the active agent to restrict release of the factor to the wound site.

Dwg.0/9

L10 ANSWER 7 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-129305 [12] WPIDS

DOC. NO. CPI: C2003-033098

TITLE: New isolated nucleic acid molecule comprising sequences encoding the CA125 protein, useful for diagnosing, preventing and/or treating cancer, e.g. ovarian, pancreatic, breast, endometrial or lung carcinomas.

DERWENT CLASS: B04 D16

INVENTOR(S): LLOYD, K O; YIN, B W T

PATENT ASSIGNEE(S): (SLOK) SLOAN KETTERING INST CANCER RES

COUNTRY COUNT: 100

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002092836	A2	20021121	(200312)*	EN	98
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
US 2003078399	A1	20030424	(200330)		
US 2003104442	A1	20030605	(200339)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 2002092836 A2		WO 2002-US14768	20020509
US 2003078399 A1	Provisional	US 2001-290480P	20010511
		US 2002-142515	20020509
US 2003104442 A1	Provisional	US 2001-290480P	20010511
	CIP of	US 2002-142515	20020509
	CIP of	WO 2002-US14768	20020509
		US 2002-243243	20020913

PRIORITY APPLN. INFO: US 2001-290480P 20010511; US 2002-142515 20020509; US 2002-243243 20020913

AN 2003-129305 [12] WPIDS

AB WO 200292836 A UPAB: 20030218

NOVELTY - An isolated nucleic acid molecule (I) comprising sequences encoding the CA125 protein, or its portion, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) the gene encoding the CA125 protein;

(2) a vector comprising (I);

(3) an expression system comprising the vector;

(4) a method for producing CA125 protein comprising the expression system;

(5) an isolated nucleic acid molecule comprising a sequence capable of hybridizing to (I);

(6) a method of inhibiting expression of CA125 inside a cell by vector-directed expression of RNA able to hybridize with the RNA of CA125;

(7) a method for detecting ovarian cancer in a subject;

(8) a method of monitoring ovarian cancer therapy in a subject;

(9) a method for inhibiting the expression of the CA125 protein comprising contacting the nucleic acid in (5) to hybridize a gene or transcript encoding the CA125 protein, thus inhibiting the expression of the protein;

(10) a composition comprising the nucleic acid molecule in (5);

(11) a vaccine for a cancer that expresses CA125 protein comprising:

(a) (I) or the gene in (1);

(b) the vector comprising the nucleic acid molecules, which when expressed, are capable of producing a product that induces an immune response to CA125 protein;

(c) the expressed CA125 protein; or

(d) a substance that induces an immune response to CA125 protein;

(12) a method for preventing or treating cancer that expresses CA125 in a subject comprising administering to the subject the vaccine in (11);

(13) a method for diagnosis of cancer that expresses CA125;

(14) a method for monitoring the therapy of cancer, which expresses CA125;

(15) a method of producing CA125 protein;

(16) the CA125 protein expressed in the method in (15);

(17) a method for producing antibodies against CA125 protein using the protein in (16);

(18) antibodies produced in (17);

(19) a method for monitoring the therapy, or for diagnosis of cancer, which expresses CA125 using the antibodies in (18);

(20) a method for determining the immunoreactive part of CA125 by contacting the antibodies in (18) with the protein in (16);

(21) a transgenic non-human organism or mammal comprising (I);

(22) a non-human organism or mammal, where the expression of CA125 is inhibited; and

(23) a method for screening a compound for treating cancer that expresses CA125 protein by administering the compound to the transgenic nonhuman organism, a decrease in expression of CA125 protein indicating that the compound may be useful for treating cancer.

ACTIVITY - Cytostatic.

No biological data given.

MECHANISM OF ACTION - Gene therapy; Vaccine.

USE - The nucleic acid molecules, vaccine and methods are useful for diagnosing, preventing and treating cancer, e.g. ovarian, pancreatic, breast, endometrial or lung carcinoma (claimed).

Dwg.0/13

L10 ANSWER 8 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-723186 [78] WPIDS

CROSS REFERENCE: 1998-251232 [22]; 2000-679675 [66]; 2001-424487 [45]

DOC. NO. CPI: C2002-204680

TITLE: New Ehrlichia ruminantium polynucleotides, useful as vaccines for inducing protective immunity, and protecting animals or humans against rickettsial diseases, e.g. typhus, spotted fever or heart water.

DERWENT CLASS: B04 C06 D16

INVENTOR(S): ALLEMAN, A R; BARBET, A F; BOWIE, M V; BURRIDGE, M J; GANTA, R R; MAHAN, S M; MCGUIRE, T C; MORELAND, A L; RURANGIRWA, F R; SIMBI, B H; WHITMIRE, W M; KAMPER, S M; MWANGI, D M; WHITMIRE, W W

PATENT ASSIGNEE(S): (ALLE-I) ALLEMAN A R; (BARB-I) BARBET A F; (BOWI-I) BOWIE M V; (BURR-I) BURRIDGE M J; (GANT-I) GANTA R R; (MAHA-I) MAHAN S M; (MCGU-I) MCGUIRE T C; (MORE-I) MORELAND A L; (RURA-I) RURANGIRWA F R; (SIMB-I) SIMBI B H; (WHIT-I) WHITMIRE W M; (KAMP-I) KAMPER S M; (MWAN-I) MWANGI D M; (UYFL) UNIV FLORIDA

COUNTRY COUNT: 100

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

WO 2002066652 A2 20020829 (200278)* EN 206
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
US 2002132789 A1 20020919 (200278)
US 2003044422 A1 20030306 (200320)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002066652 A2		WO 2002-US5772	20020220
US 2002132789 A1	CIP of	US 1996-733230	19961017
	Div ex	US 1997-953326	19971017
	Provisional	US 1999-130725P	19990422
	CIP of	US 1999-337827	19990622
	Div ex	US 2000-553662	20000421
	Provisional	US 2001-269944P	20010220
		US 2002-62994	20020131
US 2003044422 A1	Provisional	US 2001-269944P	20010220
		US 2002-81051	20020220

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 2002132789 A1	CIP of	US 6025338
	Div ex	US 6251872

PRIORITY APPLN. INFO: US 2001-269944P 20010220; US 1996-733230 19961017; US 1997-953326 19971017; US 1999-130725P 19990422; US 1999-337827 19990622; US 2000-553662 20000421; US 2002-62994 20020131; US 2002-81051 20020220

AN 2002-723186 [78] WPIDS
CR 1998-251232 [22]; 2000-679675 [66]; 2001-424487 [45]
AB WO 200266652 A UPAB: 20030324
NOVELTY - An isolated polynucleotide from Ehrlichia ruminantium (formerly Cowdria ruminantium), which has a sequence comprising one of 75 sequences of 18 - 6190 base pairs, given in the specification or its complements, is new.

DETAILED DESCRIPTION - A new isolated polynucleotide comprises:

(a) has one of 75 sequences with 18 - 6190 bp, given in the specification, or its complements;

(b) has 20 - 99.99 % identity to (a);

(c) encodes a polypeptide having any of 33 amino acid sequences with 9 - 648 amino acids, given in the specification, or its

complement;

(d) encodes a polypeptide encoded by the complement of any of 20 nucleotide sequences having 226 - 2766 bp, given in the specification;

(e) encodes a polypeptide fragment or variant of the polypeptides of (a) - (d), where the fragment or variant has the same serologic activity as the native polypeptide; or

(f) encodes a polypeptide fragment or variant of the polypeptide encoded by the complement of any of (a) - (e), where the fragment or variant has the same serologic activity as the native polypeptide.

INDEPENDENT CLAIMS are also included for the following:

(1) a host cell comprising the new polynucleotide;

(2) an isolated polypeptide encoded by the new polynucleotide;

(3) inducing immunity in an individual by administering a composition comprising a carrier, and the new polynucleotide or polypeptide; and

(4) detecting the presence of E. ruminantium in a biological sample by contacting the sample with the new polynucleotide or polypeptide.

ACTIVITY - Immunostimulant; Antibacterial.

MECHANISM OF ACTION - Vaccine. DBA/2 mice were immunized with the bacterial recombinants, and then challenged with E. ruminantium 4 weeks after the 3rd inoculation. Negative control included naive mice and mice that have been immunized with bacterial lysates containing pGEM-7zf(+) vector alone. The animals were then observed for sickness and death over time. Results showed that mice immunized with lysates from the recombinants had survival rates of 60 % or 89 %, while those in the control only had a survival rate of 0 and 10 %.

USE - The E. ruminantium polynucleotide or polypeptide encoded by it, is useful for inducing immunity, particularly protective immunity, in an individual. This polynucleotide or polypeptide is also useful for detecting the presence of E. ruminantium in a biological sample (all claimed). This polynucleotide or polypeptide is useful in vaccines for protecting animals or humans against rickettsial diseases, e.g. typhus, spotted fever or heart water. These are also useful for detecting antibodies to pathogens.

Dwg.0/5

L10 ANSWER 9 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-599772 [64] WPIDS

CROSS REFERENCE: 2003-401674 [38]

DOC. NO. CPI: C2002-169592

TITLE: New smooth muscle myosin heavy chain promoter/enhancers, useful for smooth muscle tissue-specific targeting and expression, or for genetic engineering as a means to investigate smooth muscle cell physiology and pathophysiology.

DERWENT CLASS: B04 D16

INVENTOR(S): MANABE, I; OWENS, G K

PATENT ASSIGNEE(S): (OWEN-I) OWENS G K; (MANA-I) MANABE I
COUNTRY COUNT: 97
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002059270	A2	20020801	(200264)*	EN	110
US 2003017549	A1	20030123	(200338)		75

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU DM DZ EC ES GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002059270	A2	WO 2002-US2016	20020124
US 2003017549	A1 Provisional	US 1998-71300P	19980116
	CIP of	WO 1999-US1038	19990115
	CIP of	US 2000-600319	20000713
	Provisional	US 2001-263811P	20010124
		US 2002-57726	20020124

FILING DETAILS:

PATENT NO	KIND	PATENT NO
US 2003017549	A1	WO 9936101

PRIORITY APPLN. INFO: US 2001-263811P 20010124; US 1998-71300P 19980116; WO 1999-US1038 19990115; US 2000-600319 20000713; US 2002-57726 20020124

AN 2002-599772 [64] WPIDS
CR 2003-401674 [38]
AB WO 200259270 A UPAB: 20031006

NOVELTY - An isolated, synthetic, recombinant **polynucleotide** comprising a smooth muscle myosin heavy chain (SM-MHC) promoter/enhancer sequence that is capable of conferring smooth muscle specific expression in vivo, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a **polynucleotide** capable of conferring smooth muscle cell specific expression, where the **polynucleotide** hybridizes under stringent conditions to the novel SM-MHC promoter/enhancer;

(2) an expression **vector** comprising SM-MHC promoter/enhancer sequence selected from:

(a) a 16011 (S1) or 13518 (S2) base pair sequence, given in the specification;

(b) the regions of nucleotides 5663-5889, 1-6700 and 9500-15800, or 1-9500 and 11700-13700 of S1; or

(c) S1 except that CArG2 or the intronic CArG has been mutated;

(3) a genetically engineered host cell comprising the **vector** of (2);

(4) a transgenic, non-human animal containing the **polynucleotide** of (1);

(5) a composition comprising the **polynucleotide** of (1) and a **carrier**;

(6) expression of a **polynucleotide** in a smooth muscle cell in vivo comprising introducing into the smooth muscle cell the **polynucleotide** operably linked to SM-MHC promoter/enhancer sequence that is capable of conferring smooth muscle specific expression in vivo; and

(7) screening a compound that modulates the activity of SM-MHC promoter/enhancer comprising:

(a) contacting a test compound with a cell or an animal model system containing the SM-MHC promoter/enhancer operably linked to a reporter gene;

(b) detecting expression of the reporter gene; and

(c) comparing the expression detected in (b) to the amount of expression obtained in the absence of the test compound, so that if the level obtained in (b) is higher or lower than that obtained in the absence of the test compound, a compound that modulates the activity of the SM-MHC promoter/enhancer has been identified.

ACTIVITY - Antiarteriosclerotic; Antiasthmatic; Antiinflammatory; Cardiant; Hypotensive.

No biological data is given.

MECHANISM OF ACTION - Gene Therapy.

USE - The **polynucleotide** comprising a SM-MHC promoter/enhancer sequence is useful for regulating or modulating gene expression, particularly smooth muscle tissue-specific targeting and expression in vivo. The SM-MHC promoters and other **regulatory elements** are useful for genetic engineering as a means to investigate smooth muscle cell (SMC) physiology and pathophysiology. They may also be used to control the expression of protein and RNA products in SMC. The targeted delivery is useful for development of animal models of human disease to assist in developing new therapeutic targets or screening new drugs or therapies. The compositions and methods for targeted gene delivery and expression are useful in treating diseases associated with abnormal function of the SMC, e.g. systemic hypertension, pulmonary hypertension, atherosclerosis, asthma, coronary artery disease, gastrointestinal abnormalities, reproductive dysfunction or chronic bronchitis.

ADVANTAGE - Prior art uses promoters and enhancers that are not SMC specific. The SM-MHC promoter/enhancer sequence can direct gene expression specifically in smooth muscle tissues in vivo and are selectively active in subsets of SMC, e.g. vascular versus

gastrointestinal SMC or large versus small arteries. SMC targeting will permit attainment of higher local concentrations of a therapeutic gene/agent at the desired site of action than possible with systemic delivery methods resulting in a greater therapeutic benefit and fewer possible side effects.
Dwg.0/25

L10 ANSWER 10 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-590738 [63] WPIDS
DOC. NO. NON-CPI: N2002-468723
DOC. NO. CPI: C2002-167192
TITLE: New transgenic nematode having a transgene that regulates the expression of a nematode secretory product, useful for screening anti-nematode agents for treating, preventing or reducing nematode infestation in plants or individuals.
DERWENT CLASS: C06 D16 P14
INVENTOR(S): BURNAM, L; LINK, E; LIU, L; SLUDER, A; WESTLUND, B; LIU, L X
PATENT ASSIGNEE(S): (BURN-I) BURNAM L; (LINK-I) LINK E; (LIUL-I) LIU L; (SLUD-I) SLUDER A; (WEST-I) WESTLUND B; (CAMB-N) CAMBRIA BIOSCIENCES LLC
COUNTRY COUNT: 100
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002057440	A2	20020725	(200263)*	EN	105

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

US 2003126625 A1 20030703 (200345)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002057440	A2	WO 2002-US1332	20020118
US 2003126625	A1 Provisional	US 2001-263081P	20010118
		US 2002-51644	20020118

PRIORITY APPLN. INFO: US 2001-263081P 20010118; US 2002-51644 20020118
AN 2002-590738 [63] WPIDS
AB WO 200257440 A UPAB: 20021001
NOVELTY - A transgenic nematode, the cells of which contain a

transgene comprising a **regulatory element** of a gene that encodes a nematode secretory product or its homolog operably linked to a DNA sequence encoding a detectable marker, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) identifying a compound that inhibits a nematode secretion pathway;

(2) generating a nematode;

(3) a pharmaceutical composition comprising the compound identified by the method of (1) and a pharmaceutical **carrier**;

(4) anti-nematode agent for use in preventing or reducing nematode infestation of a plant comprising the compound identified by the method of (1) and an agricultural **carrier**;

(5) treating or reducing the likelihood of nematode infection in an individual by identifying an individual at risk or suffering from a nematode infection and administering the pharmaceutical composition of (3);

(6) preventing or reducing nematode infestation of a plant, comprising:

(a) identifying a plant at risk of nematode infestation and applying the anti-nematode agent of (4) to the plant or to the vicinity of the plant;

(b) treating soil in which a plant is be grown with the anti-nematode agent; or

(c) treating a seed from which a plant is to be grown with the anti-nematode agent;

(7) identifying a target for anti-nematode compound development;

(8) a mutant nematode identified in method (7);

(9) **vector** comprising:

(a) a vap-1 **polynucleotide** that:

(i) encodes a **polypeptide** with a 425 residue amino acid sequence (VAP-1), given in the specification;

(ii) encodes a **polypeptide** having at least 10 consecutive residues of VAP-1 or at least 50 % identity to VAP-1;

(iii) has a sequence comprising the Caenorhabditis elegans vap-1 promoter operably linked to a **polynucleotide** encoding a detectable marker; or

(iv) has a 1341 base pair sequence (vap-1 cDNA), given in the specification;

(b) a vap-2 **polynucleotide** that:

(i) encodes a **polypeptide** with a 479 residue amino acid sequence (VAP-2), given in the specification;

(ii) encodes a **polypeptide** having at least 10 consecutive residues of VAP-2 or at least 50 % identity to VAP-2;

(iii) has a sequence comprising the C. elegans vap-2 promoter operably linked to a **polynucleotide** encoding a detectable marker; or

(iv) has a 1422 base pair sequence (vap-2 cDNA), given in the

specification; or

(c) a **regulatory element** comprising a **polynucleotide** sequence comprising the promoter of a gene belonging to the C. elegans vap family of genes operably linked to a **polynucleotide** encoding a detectable marker;

(10) expressing a first **polynucleotide** in a C. elegans amphid sheath cell; and

(11) expressing a **polypeptide** in a C. elegans amphid sheath cell.

ACTIVITY - Nematocide; Antihelmintic.

No biological data is given.

MECHANISM OF ACTION - Gene Therapy; Nematode Secretory Pathway Inhibitor.

USE - The transgenic nematode is useful for screening anti-nematode agents. The anti-nematode agent or pharmaceutical composition is useful for preventing or reducing nematode infestation of plants, or for treating or reducing the likelihood of nematode infestation in an individual. (All claimed).

Dwg.0/8

L10 ANSWER 11 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-590711 [63] WPIDS

DOC. NO. NON-CPI: N2002-468716

DOC. NO. CPI: C2002-167165

TITLE: New isolated estrogen receptor alpha with A908G mutation or K303R substitution, useful as diagnostic marker in breast tissue such as pre-malignant lesions for the development of breast cancer, particularly invasive breast cancer.

DERWENT CLASS: B04 D16 S03

INVENTOR(S): ALLRED, D C; FUQUA, S; HOPP, T A; O'CONNELL, P

PATENT ASSIGNEE(S): (ALLR-I) ALLRED D C; (FUQU-I) FUQUA S; (HOPP-I) HOPP T A; (OCON-I) O'CONNELL P; (BAYU) BAYLOR COLLEGE MEDICINE

COUNTRY COUNT: 23

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002057283	A1	20020725	(200263)*	EN	133
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR					
W: AU CA JP					
US 2003027778	A1	20030206	(200313)		
US 2003186313	A1	20031002	(200365)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002057283	A1	WO 2002-US4982	20020116
US 2003027778	A1 Provisional	US 2001-262990P	20010119

	Provisional	US 2001-304018P	20010709
		US 2002-52092	20020118
US 2003186313 A1	Provisional	US 2001-262990P	20010119
	Provisional	US 2001-304018P	20010709
	Div ex	US 2002-52092	20020118
		US 2003-437107	20030513

PRIORITY APPLN. INFO: US 2001-304018P 20010709; US 2001-262990P 20010119; US 2002-52092 20020118; US 2003-437107 20030513

AN 2002-590711 [63] WPIDS

AB WO 200257283 A UPAB: 20021001

NOVELTY - An isolated estrogen receptor alpha nucleic acid sequence comprising an A908G mutation, or an amino acid sequence comprising a K303R substitution, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) a method of detecting susceptibility to development of breast cancer or invasive breast cancer in an individual, or diagnosing breast cancer in an individual;

(2) a method of detecting susceptibility to development of invasive breast cancer from a pre-malignant lesion in a breast;

(3) a method of classifying breast cancer in an individual;

(4) a method of diagnosing breast cancer in an individual;

(5) a kit for diagnosing an A908G mutation in an estrogen receptor alpha nucleic acid sequence, comprising at least one primer selected from any of 7 sequences, e.g. 5'-CAAGCGCCAGAGAGAGATGATG-3';

(6) a monoclonal antibody that binds immunologically to an acetylated estrogen receptor alpha amino acid sequence or its an antigenic fragment, or to an A908G mutation in an estrogen receptor alpha nucleic acid sequence;

(7) a method to correct a G mutation at nucleotide 908 of an estrogen receptor alpha nucleic acid sequence in a cell of an individual;

(8) a method to prevent breast cancer in an individual;

(9) a method to treat breast cancer in an individual, where an estrogen receptor alpha nucleic acid sequence in a breast cell of the individual has an A908G mutation;

(10) a method of identifying a modulator of an estrogen receptor alpha K303R polypeptide;

(11) a method of screening for a modulator of an estrogen receptor alpha polypeptide comprising a K303R substitution;

(12) a method of identifying a polypeptide which interacts with an estrogen receptor alpha polypeptide comprising a K303R substitution;

(13) a method of treating an individual for breast cancer;

(14) a method of identifying a peptide that interacts with an estrogen receptor alpha K303R polypeptide;

(15) a method of identifying a compound for the treatment of breast cancer associated with an estrogen receptor alpha K303R

polypeptide;

(16) a compound obtained by the method of (15);

(17) a composition comprising the compound of (16), and a carrier; and

(18) a transgenic mouse comprising an estrogen receptor alpha polynucleotide with an A908G mutation or K303R polypeptide.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Estrogen Receptor Antagonist Alpha.

USE - The estrogen receptor alpha are useful as diagnostic markers in breast tissue such as pre-malignant lesions for the development of breast cancer, particularly invasive breast cancer. The methods are useful for determining susceptibility to development of breast cancer, for diagnosing, preventing or treating breast cancer. The transgenic mice may be used for screening and identifying agents that interact with the estrogen receptor alpha, or affect breast tissue health. DNA was prepared from normal breast epithelium adjacent to the hyperplastic lesion of the samples containing the A908G estrogen receptor alpha alteration. The estrogen receptor alpha variant sequence was detected in the normal adjacent epithelium of some of the samples tested. The A908G estrogen receptor alpha transition is frequently present in pre-malignant lesions of the breast and can occur in the adjacent normal-appearing breast epithelium.

Dwg.0/9

L10 ANSWER 12 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-599456 [64] WPIDS
DOC. NO. CPI: C2002-169287
TITLE: Isolating peptide domains (PD)s, useful for modulating angiogenesis, by utilizing PD display library which may be used in both display mode attached to microorganism surface, and in secretion mode such that PDs are secreted in soluble form.
DERWENT CLASS: B04 D16
INVENTOR(S): GYURIS, J
PATENT ASSIGNEE(S): (GPCB-N) GPC BIOTECH INC
COUNTRY COUNT: 95
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002046213	A2	20020613	(200264)*	EN	98
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2002041801	A	20020618	(200266)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002046213 A2		WO 2001-US51389	20011107
AU 2002041801 A		AU 2002-41801	20011107

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2002041801 A	Based on	WO 2002046213

PRIORITY APPLN. INFO: US 2000-246461P 20001107
AN 2002-599456 [64] WPIDS
AB WO 200246213 A UPAB: 20030906
NOVELTY - Isolating peptide domain (PD) that modulates angiogenic activity comprising utilizing a PD display library, is new.

DETAILED DESCRIPTION - Isolating (M1) a peptide domain (PD) capable of modulating angiogenic activity, comprising:

(i) providing a first PD display library comprising a variegated population of test PDs expressed on the surface of a population of display packages;

(ii) in a display mode, isolating, from the PD display library, a sub-population of display packages enriched for test PDs which have a binding specificity for an endothelial cells (EC) or its component;

(iii) in a secretion mode, simultaneously expressing the enriched test PD sub-population under conditions where the test PDs are secreted and are free of the display packages;

(iv) assessing the ability of the secreted test PDs to regulate a biological process of an EC; and

(v) assessing the ability of the test PDs capable of regulating a biological process of an EC for the ability to regulate angiogenesis, thereby identifying a PD capable of modulating angiogenic activity, is new.

INDEPENDENT CLAIMS are also included for the following:

(1) a PD display library (II) enriched for test PDs having a binding specificity and/or affinity for an EC or its component and which inhibit EC proliferation and/or migration in a target EC;

(2) a vector (III) comprising a chimeric gene (IIIa) for a chimeric protein, which chimeric gene comprises:

(i) a coding sequence for a test PD;

(ii) a coding sequence for a surface protein of a display package; and

(iii) RNA splice sites flanking the coding sequence for the surface protein, where in a display mode, the chimeric gene is expressed as a fusion protein including the test PD and the surface protein such that the test PD can be displayed on the surface of a population of display packages, where in the secretion mode, the test PD is expressed without the surface protein as a result of the

coding sequence for the surface protein being removed by RNA splicing;

(3) a vector library (IV), where each vector comprises (IIIa), and (IV) collectively encodes a variegated population of test PDs;

(4) a cell composition comprising a population of cells containing (IV);

(5) modulating (M2) angiogenic process in an animal by administering a pharmaceutical composition comprising one or more test PD or its peptidomimetics which regulate biological process in target cell, formulated in a carrier, where the test PDs are identified by (M1);

(6) a construct such as pAM7 and pAM9 M13/COS peptide expression plasmid; and

(7) conducting a pharmaceutical business, comprises:

(i) identifying one or more PDs which are capable of modulating angiogenic activity by (M1);

(ii) conducting therapeutic profiling of the identified PD(s), or other homologs or peptidomimetics, for using the PD(s) to modulate angiogenesis; and

(iii) formulating a pharmaceutical preparation including one or more identified PD(s) as a product having an therapeutic profile, or licensing to a third party, the rights for further development of agents to modulate angiogenesis.

ACTIVITY - Vasotropic; Vulnerary; Antiulcer; Antiarthritic; Antidiabetic; Cytostatic; Antiangiogenic. No supporting data is given.

MECHANISM OF ACTION - Angiogenesis modulator. Inhibition of bovine capillary endothelial (BCE) cell proliferation in transwells by peptide domains identified by (M1) was tested. COS-7 cells were transfected with pAM9-myc, pAM90RGD and pAM9-K1 plasmids, respectively, that direct the expression and secretion of the Myc epitope-6xHis, the Arg-Gly-Asp (RGD) and the angiostatin first kringle domain peptide domains. The transfected COS-7 cells were co-incubated in transwells with BCE cells whose proliferation was stimulated by 1 ng/ml basic fibroblast growth factor (bFGF). As controls, untransfected COS-7 cells and bFGF stimulated BCE cells were similarly co-incubated and synthetic Myc-6xHis and RGD peptide domains as well as purified K1 were added to the media. The proliferation of the bFGF stimulated BCE cells were measured 72 hours later. The synthetic RGD peptide domain and the purified K1 as well as the COS-7 secreted RGD and K1 peptide domains inhibited bFGF stimulated BCE cell proliferation (positive controls). The negative control Myc epitope-6x His peptide did not have inhibitory effect on BCE proliferation.

USE - For isolating a peptide domain capable of modulating angiogenic activity i.e., stimulating or inhibiting angiogenesis. (M1) is most preferably useful for isolating a peptide domain capable of inhibiting angiogenic activity, where in step (iv) the ability of the secreted test peptide domain to inhibit EC proliferation and/or migration is assessed and in step (v) the ability of the test peptides capable of inhibiting EC migration

and/or proliferation, to inhibit angiogenesis. (M2) is useful for modulating angiogenic process in an animal (claimed). (M2) is preferably useful for modulating angiogenesis by modulating EC proliferation and/or migration, e.g., (M2) is useful for treating patient suffering from ischemia, wound, ulcers, etc., which require increased angiogenesis or neovascularization and for treating patients suffering from arthritis, diabetes, cancer, etc., in which prevention of new blood vessel formation or reduction in the number of existing blood vessels, is desired.

ADVANTAGE - The display mode and secretion mode can be carried out without the need to sub-clone the test PD coding sequence into another vector. The ability to reduce loss of PD sequences from the sub-library by eliminating sub-cloning steps.

Dwg.0/9

L10 ANSWER 13 OF 37 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-547711 [58] WPIDS
DOC. NO. NON-CPI: N2002-433612
DOC. NO. CPI: C2002-155311
TITLE: Diagnosing tumor in a patient e.g. for determining the positive or negative progression of a tumor, comprises measuring the concentration of progesterone induced blocking factor or its derivative in a patient's urine or serum sample.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): HENICS, T; KLADE, C; KOCH, M; NAGY, E; PALKOVICS, T; POLGAR, B; SZEKERES-BARTHO, J
PATENT ASSIGNEE(S): (CIST-N) CISTEM BIOTECHNOLOGIES GMBH; (BIOD-N) BIODEVELOPS VERW VON LIZENZEN GMBH
COUNTRY COUNT: 99
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002044734	A1	20020606	(200258)*	EN	117
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW					
AU 2002024901	A	20020611	(200264)		
AT 2000001997	A	20021215	(200308)		
AT 410753	B	20030615	(200348)		
EP 1337850	A1	20030827	(200357)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002044734	A1	WO 2001-EP13876	20011128
AU 2002024901	A	AU 2002-24901	20011128
AT 2000001997	A	AT 2000-1997	20001128
AT 410753	B	AT 2000-1997	20001128
EP 1337850	A1	EP 2001-994744	20011128
		WO 2001-EP13876	20011128

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2002024901	A	Based on	WO 2002044734
AT 410753	B	Previous Publ.	AT 2000001997
EP 1337850	A1	Based on	WO 2002044734

PRIORITY APPLN. INFO: AT 2000-1997 20001128

AN 2002-547711 [58] WPIDS

AB WO 200244734 A UPAB: 20030111

NOVELTY - Diagnosing (I) a tumor in a patient, comprises taking a sample from the patient, measuring the concentration of progesterone induced blocking factor (PIBF), its derivative or fragment in the sample and determining whether the concentration of PIBF in the sample is above or below a predetermined threshold value, where the concentration above the threshold value identifies a patient with a tumor.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a kit comprising a first reagent comprising an anti-PIBF antibody or its fragment and a second reagent comprising PIBF, its derivative or fragment, at a defined concentration;

(2) use of an anti-PIBF antibody, preferably a monoclonal anti-PIBF antibody or its fragment in (I);

(3) use of an anti-PIBF antibody, preferably a monoclonal anti-PIBF antibody, especially humanized anti-PIBF antibody or its fragment for the preparation of an anti-tumor medicine;

(4) use of PIBF or its derivative or fragment in (I), or in the preparation of an anti-tumor medicine;

(5) use of a **polynucleotide** encoding PIBF or its derivative or a fragment or PIBF-antisense molecule for the preparation of an anti-tumor medicine;

(6) a recombinant protein (II) with a PIBF activity, comprising a sequence (S1) of 757 amino acids, given in the specification, or a sequence 98 % identical to (S1), as determined by FAST/A algorithm or an amino acid sequence with an amino acid identity of 95 % to the sequence from amino acid residues 580 - 630 of (S1) as determined by FAST/A algorithm, or a PIBF activity of 50 % of the natural human PIBF molecule;

(7) a protein (III) with a PIBF activity comprising a sequence (S2) of 756 amino acids, given in the specification or an amino acid

with identity of 85 - 99 %, as determined by FAST/A algorithm;

(8) a protein (IV) characterized in that it comprises an amino acid sequence with an identity of 85 - 95 % as determined by FAST/A algorithm to a sequence chosen from 16 sequences, given in the specification, such as a sequence of 298, 297, 87, 118, 70, 185 or 258 amino acids, where the protein is an alternatively processed PIBF protein;

(9) a nucleic acid molecule (V) encoding (II) or (III);

(10) a nucleic acid molecule (VI) encoding an alternatively processed PIBF protein characterized in that it comprises a nucleic acid sequence with an identity of 80 - 95 % to a sequence chosen from 16 sequences, given in the specification, such as a sequence of 957, 1173, 983, 689, 1257, 1173, 1596 or 2403 base pairs (bp), or a hybridizable sequence or degenerate equivalent;

(11) a nucleic acid **vector** (VII) comprising (V) or (VI), and a suitable **regulatory element**; and

(12) a cell comprising (VII).

ACTIVITY - Cytostatic. No biological data is given.

MECHANISM OF ACTION - Gene therapy; Antisense therapy; Vaccine.

USE - (I) is useful for diagnosing a tumor, preferably an epithelial carcinoma, especially a lung, colon or breast carcinoma in a patient. (I) is useful for determining the positive or negative progression of a tumor in a patient, by diagnosing a tumor in a patient and determining whether the measured concentration of PIBF or its derivative or a fragment in the sample is above or below at least one previously measured concentration of PIBF or its derivative. PIBF is useful in the preparation of a anti-tumor vaccine, which further comprises an **adjuvant** (claimed).

ADVANTAGE - The method is simple and sample collection is performed without any surgical step and without the necessity of specific high-tech instruments. PIBF concentration can be measured with a dry chemistry method.

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ACCESSION NUMBER: 2002-304115 [34] WPIDS

DOC. NO. CPI: C2002-088450

TITLE: Novel Smac peptides and polynucleotides encoding the peptides, useful for stimulating apoptosis in neoplastic or tumor cell which overexpresses inhibitor of caspase, and for identifying apoptosis modulating compounds.

DERWENT CLASS: B04 D16

INVENTOR(S): ALNEMRI, E S

PATENT ASSIGNEE(S): (UYJE-N) UNIV JEFFERSON THOMAS; (ALNE-I) ALNEMRI E S

COUNTRY COUNT: 98

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PATENT NO	KIND	DATE	WEEK	LA	PG

WO 2002016418 A2 20020228 (200234)* EN 78
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001086730 A 20020304 (200247)
US 2002132786 A1 20020919 (200264)
EP 1315811 A2 20030604 (200337) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002016418	A2	WO 2001-US26492	20010824
AU 2001086730	A	AU 2001-86730	20010824
US 2002132786	A1 Provisional	US 2000-227735P	20000824
		US 2001-939293	20010824
EP 1315811	A2	EP 2001-966195	20010824
		WO 2001-US26492	20010824

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001086730	A	Based on	WO 2002016418
EP 1315811	A2	Based on	WO 2002016418

PRIORITY APPLN. INFO: US 2000-227735P 20000824; US 2001-939293 20010824

AN 2002-304115 [34] WPIDS

AB WO 200216418 A UPAB: 20021031

NOVELTY - An isolated Smac peptide or **polypeptide** (I) comprising, or consisting of at least 2 contiguous residues from residues 56-139 of a 239 amino acid Smac **polypeptide** sequence (S1), given in specification, and upto 184 contiguous residues derived from residues 56-239 of (S1), its functional variant or functional equivalent, is new.

DETAILED DESCRIPTION - An isolated Smac peptide or **polypeptide** (I) comprising, or consisting of at least 2 contiguous residues from residues 56-139 of a 239 amino acid Smac **polypeptide** sequence (S1), given in specification, and upto 184 contiguous residues derived from residues 56-239 of (S1), its functional variant or functional equivalent, is new. (I) is capable of specifically binding to at least a portion of an inhibitor of apoptosis protein (IAP).

INDEPENDENT CLAIMS are also included for the following:

(1) an isolated nucleic acid (II) encoding (I);

(2) an expression **vector** (III) comprising (II) operatively linked to **regulatory elements**;

(3) a host cell (IV) transformed with (III);

(4) identifying (M1) a compound that inhibits apoptosis, comprising:

(a) separately contacting several cell populations expressing a cytosolic Smac (a Smac isoform that begins with MKSDFYF sequence, replacing the mitochondrial targeting sequence (residues 1-55 of (S1)), and residues 56-60 of (S1)) and an inhibitor of BID with a compound to be tested for apoptotic inhibiting activity;

(b) incubating the cell populations with a direct stimulus of the cell death pathway; and

(c) measuring the specific apoptotic activity of the cell populations, where inhibition of the specific apoptotic activity is indicative that the compound is an inhibitor of apoptosis;

(5) an isolated antibody (V) that specifically binds to (I) comprising an amino acid sequence having two contiguous amino acid residues derived from 56-139 of (S1), and upto 184 contiguous amino acid residues derived from 56-239 of (S1), its functional variant or functional equivalent;

(6) an isolated antibody (VI) that specifically binds to an epitope located on N-terminus of Smac;

(7) a composition comprising (I) comprising an amino acid sequence having two contiguous amino acid residues derived from 56-139 of (S1), and upto 184 contiguous amino acid residues derived from 56-239 of (S1), its functional variant or functional equivalent, or (II) comprising a **polynucleotide** having a sequence encoding (I), or (V) or (VI) and a **carrier**;

(8) an isolated nucleic acid molecule comprising, consisting essentially of, or consisting of a **polynucleotide** having a sequence encoding cytosolic isoform of Smac; and

(9) an isolated **polypeptide** comprising, consisting essentially of, or consisting of an amino acid sequence for cytosolic isoform of Smac.

ACTIVITY - Cytostatic.

MECHANISM OF ACTION - Apoptosis inducer (claimed); gene therapy.

MCF-7 cells (0.5 multiply 105 cells/well) in 12 well plates were transfected with 0.5 micro g of GFP-Smac expression construct together with 0.5 micro g of empty **vector** plasmids or plasmids encoding Bcl-xL. Twenty-four hours after transfection cells were treated with tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) for ten hours and then the normal (flat and attached) and apoptotic (round and detached) GFP-expressing cells were counted using fluorescence microscopy. Treatment of MCF7 cells with TRAIL, induced apoptosis in 28-40 % of the cells. Overexpression of Bcl-xL inhibited Trail-induced apoptosis of MCF-7 cells. Transfection of GFP-Smac into the Bcl-xL-expressing MCF7 cells bypassed the Bcl-xL inhibition and sensitized these cells to TRAIL-induced apoptosis to a level almost similar to that observed in the absence of Bcl-xL

(22-30 % apoptosis). Moreover, transfection of GFP-Smac into MCF-7 cells in the absence of overexpressed Bcl-xL, potentiated TRAIL-induced apoptosis and resulted in 65-80 % cell death. The ability of GFP-Smac to potentiate TRAIL induced apoptosis in the absence of overexpressed Bcl-xL was consistent with the presence of an IAP block in these cells. This was confirmed by the finding that MCF-7 cells expressed high levels of XIAP.

USE - (I) comprising an amino acid sequence having two contiguous amino acid residues derived from 56-139 of (S1), and upto 184 contiguous amino acid residues derived from 56-239 of (S1), its functional variant or functional equivalent, and (II) which comprises **polynucleotide** having sequence encoding (I) are useful for inducing apoptosis in a cell. The Smac **polypeptide** and **polynucleotide** are useful for stimulating apoptosis in a neoplastic or tumor cell which overexpresses an inhibitor of caspase, where the inhibitor inhibits activation or activity of caspase-3, caspase-7 or caspase-9. Preferably, the cell overexpresses at least a portion of IAP. (I) is useful for identifying an inhibitor or enhancer of a caspase-mediated apoptosis which involves contacting a cell transformed or transfected with a **vector** expressing (I) with a candidate inhibitor or candidate enhancer; and detecting cell viability, an increase in cell viability indicates the presence of an inhibitor and a decrease in cell viability indicates the presence of an enhancer. Optionally, the method involves detecting the presence of large and small caspase subunits after contacting cell transformed with the **vector** expressing (I), with the candidate compound. A decrease in processing indicates the presence of an inhibitor and an increase in the processing indicates the presence of an enhancer. Preferably, the large and small subunits of caspase-3, caspase-7 or caspase-9 is detected. (I) is also useful for identifying a compound that inhibits Smac binding to Smac-binding molecule (a portion of IAP e.g. a BIR domain such as BIR1, BIR2 or BIR3, or a full-length IAP) which involves contacting a candidate compound with a Smac peptide in the presence of a Smac-binding molecule and detecting the displacement or inhibition of binding of the Smac binding molecule from the Smac peptide. The method optionally involves contacting a candidate compound with a Smac peptide in the presence of Smac binding molecule and performing the functional assay that confirms displacement of the Smac binding molecule from the Smac peptide. The functional assay detects presence of large and small caspase activities from which a level of caspase processing activity is determined, where a decrease in processing confirms displacement. Preferably, presence of large and small subunits of caspase-3, caspase-7 and caspase-9 are detected in the functional assay which detects the presence of a substrate cleavage product produced by a caspase cleavage of the substrate. (All claimed). (II) is useful in gene therapy techniques.
Dwg.0/14

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